EFFECTIVENESS OF MOTHER TO MOTHER APPROACH ON KNOWLEDGE REGARDING DENGUE FEVER AMONG MOTHERS OF UNDERFIVE CHILDREN IN SELECTED VILLAGES, SALEM

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CERTIFICATE

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ABSTRACT

A Study was done to Assess the Effectiveness of Mother to Mother Approach on Knowledge regarding Dengue fever among Mothers of Underfive Children in Selected Villages, Salem.

A Quasi experimental pre test post test with control group design was adopted. Sixty six mothers of underfive children were selected from Neikkarapatti and Poolavari villages, Salem through non probability convenience sampling technique and selected thirty mothers from Neikkarapatti as experimental group and 6 mothers as mother educators. Thirty mothers from Poolavari were selected as control group. Data was collected from 29-7-13 to 27-8-13. Semi structured interview schedule was used to assess the knowledge of mothers in experimental and control group regarding dengue fever. Mother educators were taught about dengue fever by the investigator and they in turn taught other mothers in experimental group under the supervision of investigator. Post test was conducted on the 8^{th} day of the intervention for experimental group. The findings of the study revealed that in pre test, majority of the mothers 24(80%) in experimental group and 23(76.7 %) in control group had inadequate knowledge whereas in post test 24(80%) mothers in experimental group and none of them in control group had adequate level of knowledge. The overall mean pre test score was 8.06±4.56.and post test mean score was 25.8±4.25 revealing the difference in mean score percentage of 61.15. Significant difference was found between overall scores of post test between experimental and control group ($t = 7.36$) at $P<0.05$ level. There was no significant association between the level of knowledge and the demographic variables in experimental group and control group. The study implies that the mother to mother approach of teaching is an effective intervention to increase the knowledge of the mothers regarding dengue fever.

CHAPTER-I

INTRODUCTION

"An ounce of prevention is better than a pound of care"

- Benjamin Franklin

Children are the future pillars of the Nation. Today's children are tomorrow's citizen and leaders. Child health care is the most crucial factor to determine growth of the child especially in the first five years of life. They are vulnerable to disease, death and disability owing to their age, sex, place of living, socio economic status and host of other variables. Certain specific biological and psychological needs must be met to ensure the survival and healthy development of the child and future adult. **(Rongmei Jenjen, 2008)**

Dengue fever is an acute febrile disease with potential fatal complications caused by infection of dengue virus that spread through the bite of infected female aedes mosquito. Dengue fever was first referred as "water poison" associated with flying insects in Chinese medical encyclopaedia in 265-420 A.D. Dengue virus belongs to family flaviviridae, having four zero types. It causes a wide spectrum of illness from mild asymptomatic illness to severe fatal dengue hemorrhagic fever or dengue shock syndrome and it is called as breakbone fever or dandy fever. (**ICMR, 2012)**

Dengue fever is the most common and widespread mosquito borne viral infection in the world today. It is a major health problem, mainly affecting the children in the South East Asian region since 1950. In 2012 the World Health Organization (WHO) ranked dengue as the fastest spreading vector-borne viral disease, undergoing a 30-fold increase in disease incidence over the past 50 years. Up to 50-100 million infections are now estimated to occur annually in over 100 endemic

countries, putting almost half of the world's population at risk. Global distribution of dengue fever is estimated as 100 million new cases of dengue fever and 22,000 deaths mostly among children occur worldwide each year including 500,000 cases of potentially lethal form of disease, Dengue hemorrhagic fever (DHF) and dengue shock syndrome (DSS). **(WHO, 2013)**

The incidence of dengue fever is variable and depends on the geographical region and the density of mosquito born diseases in the region. In India this disease reflects in cyclic patterns, which over the years has been increased in frequency and geographical extent. Over the past decade, the cases of dengue have increased, from 28,292 cases and 110 deaths in 2010 to 35066 cases and 216 deaths in 2012. The case fatality rate is 5% which is significantly high compared with other infectious disease. **(Chandy Sara, 2012)**

National vector born disease control programme under the Indian union health ministry revealed that Tamilnadu had recorded nearly, 9249 cases and 39 deaths of under five children due to dengue infection in 2012**. (Kannan Ramya,2012)**

Tamilnadu Directorate of Public Health & Preventive Medicine department revealed that Dengue fever has been reported regularly in Tamil Nadu and Salem district was the major contributor next to Chennai city. Out of 35066 dengue cases reported from Tamil Nadu in the year 2012, Salem had 156 cases of the disease burden. (**ICMR, 2012)**

Children carry the main burden of morbidity and mortality of dengue haemorrhagic fever and it is the leading cause of serious illness and death among children in Asian countries including India. An estimation of 500,000 people with severe dengue require hospitalization each year, a large proportion of whom are children. **(WHO, 2012)**

Unprecedented population growth, unplanned and rapid urbanisation, inadequate waste management, gaps in public health infrastructure and poor infrastructure to monitor vector mosquito breeding were cited as the main reasons for the rise in the incidence of dengue fever cases. Dengue fever inflicts a significant health, economic and social burden on the populations of dengue endemic areas. The epidemiology and ecology of dengue fever are strongly associated with human habits. Thus evaluation and enhancement of people's knowledge, attitude and practice is of greater importance to improve integrated control measures against dengue. **(Joseph, 2012)**

Need for the Study:

Dengue is a mosquito borne infection that in recent decades has become a major international public health concern. Before 1970, only nine countries had experienced severe dengue epidemics. This disease is now endemic in more than 100 countries in Africa, America, Eastern Mediterranean, south east Asia and Western Pacific .Cases across the America, South-east Asia have exceeded 1.2 million in 2008 and over 2.3 million in 2010.**(WHO, 2012)**

A Multi National study on global burden of Mosquito borne disease has revealed the global number of dengue infections per year is 390 million. India accounts for nearly one- third of all dengue cases reported globally. **(Bhatt Samir, 2013)**

India is one of the seventh identified countries in the South-East Asia region regularly reporting dengue fever and dengue hemorrhagic fever outbreak. During all these epidemics, children less than 15 years of age were quite severely affected. Certain common signs and symptoms such as fever, headache, myalgia, arthralgia and bleeding manifestations have also been observed. **(WHO, 2012)**

The incidence of dengue infection globally in the year of 2010 is 96 million. India alone contributed 34% (22 -24 millions) of infection. In addition to 294 million infections went unnoticed due to its mild ambulatory or asymptomatic presentation. (**Times of India, 2013)**

Dengue case fatality rates of the south east Asian regions are 1%. In India Focal outbreaks have reported at the rate of 3% -5% characterised by unusual manifestations involving liver and central nervous system in dengue infection. In India and Thailand, dengue infection was the most important cause of acute hepatic failure in children contributing to 18.5% and 34.3% of cases respectively. Hence early recognition and prompt initiation of appropriate supportive treatment can decrease the mortality and morbidity among children**. (Normila Dennis, 2013)**

Official records of the Indian union health ministry reveals the massive increase of dengue infection in India in the year of 2012. India had recorded 15,535 cases and 96 deaths in 2009, but over 35066 cases and 216 fatalities in 2012. Tamilnadu has recorded the highest number of deaths (60), followed by Maharashtra (59), Karnataka (21), Pubjab (15), Kerala (13) and Westbengal (9). In the number of confirmed cases, TamilNadu leads the peak with 9,249 cases followed by Bengal (6,067 cases), Kerala (3,674 cases), Karnataka (93,482 cases), Maharastra (1,464 cases) and Delhi (1,584 cases). **(Kounteya, 2012)**

Dengue hemorrhagic fever is primarily a disease of children under15 years of age in hyper endemic areas.90% of hemorrhagic fever cases are Children younger than 15 years of age. It is a significance cause of pediatric morbidity and mortality in India and mortality rate of dengue fever was as high as 10 to 20%, if left untreated. **(Arguin.P, 2009)**

Major complication of dengue infection among underfive children are dengue haemorrhagic fever with shock accompanied by respiratory and renal failure.Other complications of dengue infection among children are thrombocytopenia, encephalopathy, fulminant liver damage, organ failure, panophthalmitis and hemophagocytosis**.(Sivasaranappa,2012)**

Dengue was common in children aged less than 5 years due to immune deficiency, malnutrition, poverty, lack of health care infrastructure, illiteracy and deficient education especially among mothers regarding dengue fever. **(Sabchareon Arunee, 2009)**

Research studies shows that there is a strong linkage between mother's health related knowledge, attitude and practice with children's health. Mothers are more likely to listen and personalize health messages and thus to change their attitudes and practice, if they believe that the educator is similar to them and faces the same concerns and pressures. **(Benta A, 2012)**

Mother to mother approach is a concept based on peer education where a mother imparts health related information to a group of mothers for developing a positive group norms and healthy decision. It provides a secure warm environment where mothers can feel safe to share their feeling about health related problems. **(Haines, 2007)**

Mother to mother approach is organized around different themes such as breast feeding, pregnancy, birthing and care of children during illness. It is possible to develop sustainable trusting relationships between mothers who have experienced child birth and raising young children can help women who are yet to give birth. It plays an important role in improving the health outcomes by sharing knowledge and practice regarding health issues. **(Howes and Bode, 2003)**

Recognizing dengue haemorrhagic fever early in children, treating them correctly and taking proper care of them play an important role in reducing the mortality. Health education to improve the knowledge of mother in order to change their practice and attitude is essential to bring down the mortality of dengue haemorrhagic fever in the community. **(Tran Tan Tram et.al, 2003)**

Public education about Dengue infection and its vector had been highly effective in controlling and preventing dengue fever. Health education is particularly important for this disease because of wide spread rural nature of dengue's vector and vital importance of intensive supportive therapy for those with dengue haemorrhagic fever. **(John P.Roche, 2011)**

The above facts and studies created an insight in the investigator's mind that, by improving the knowledge of mothers of underfive children through mother to mother approach reduces the incidence of some vector borne diseases especially dengue fever. The overall aim of this present study is to improve the knowledge about dengue fever and its preventive measures among mothers of underfive children in selected villages Salem.

Statement of the Problem:

A Study to Evaluate the Effectiveness of Mother to Mother Approach on Knowledge regarding Dengue fever among Mothers of Underfive Children in Selected Villages, Salem.

Objective:

1. To assess the existing level of knowledge regarding dengue fever among mothers of underfive children in experimental group and control group.

2. To evaluate the effectiveness of mother to mother approach on the level of knowledge regarding dengue fever among mothers of underfive children in experimental group.
3. To associate the level of knowledge regarding dengue fever among mothers of underfive children in experimental group and control group with their selected demographic variables.

Operational Definition:

Effectiveness:

It refers to the gain in level of knowledge among mothers of underfive children in experimental group regarding dengue fever as determined by significant difference in the pre test and post test scores.

Mother to mother approach:

The planned set of activities, implemented in a sequence by mother educators [mothers of underfive children who have highest score in pre test] to educate regarding dengue fever to the mothers of underfive children in experimental group.

Knowledge:

The correct responses given by the mothers of underfive children to the knowledge items in the interview schedule regarding dengue fever.

Mothers:

Married women having children aged between 1 to 5 years

Underfive children:

Children in the age group between 1 to 5 years.

Dengue fever:

Dengue fever is a disease caused by dengue virus that spreads through human population by Aedes aegypti mosquito.

Assumptions:

1. Mothers may have some knowledge regarding dengue fever
2. Mother to mother approach may enhance the knowledge among mothers of underfive children regarding dengue fever.
3. Knowledge regarding dengue fever varies from one mother to another mother according to their demographic variables.

Hypotheses:

H_1: There will be significant differences between pre and post test knowledge scores regarding dengue fever among mothers of underfive children in experimental group at $P \leq 0.001$level.

H_2: There will be significant differences between post test knowledge scores regarding dengue fever among mothers of underfive children in experimental group and control group at $P \leq 0.05$level.

H_3: There will be a significant association between the post test level of knowledge scores regarding dengue fever among mothers of underfive children in experimental group and control group with their selected demographic variables at $P \leq 0.05$level.

Delimitations:

The study was limited to

- the mothers of underfive children at selected villages.
- mothers who can speak and understand Tamil language.
- mothers who are willing to participate in the study.
- only to 4 weeks

Projected Outcome:

The study was conducted to assess the effectiveness of mother to mother approach on the level of knowledge regarding dengue fever among mothers of underfive children. Finding of this study will help the community health nurse to provide health education in community using mother to mother approach.

Conceptual Framework:

The conceptual frame work of the study is based on modified Imogene King Goal Attainment theory. Imogene King explains the concept of the nurse and the patient mutually communicating information, establishing goals and taking action to attain goals

Components:

1. Perception:

Respondents/Participants: Has gained information regarding dengue fever through mass media, family members, relatives and health professional.

Researcher: Perceived the needed information through health education regarding dengue fever due to inadequate knowledge as a result of pre test among mothers of underfive children.

2. Judgement:

Participants: Accepted to participate in the study.

Researcher: Decision made to teach about dengue fever among mothers of underfive children.

3. Interaction:

Individuals come together for a purpose. The researcher educates mothers educators regarding dengue fever using flash card. The mother educators teach other mothers to achieve the goal.

4. Transaction:

Two individuals mutually identify goal and means to achieve. The investigator identifies the level of knowledge of mothers regarding dengue fever and selects mother educators (experimental group) who have highest score. Education regarding dengue fever was given to the mother educator by investigator by using flash card. The mother educator where asked to teach other mothers in experimental group by using flash cards under the supervision of the investigator .The respondent must mentally and physically ready to gain knowledge.

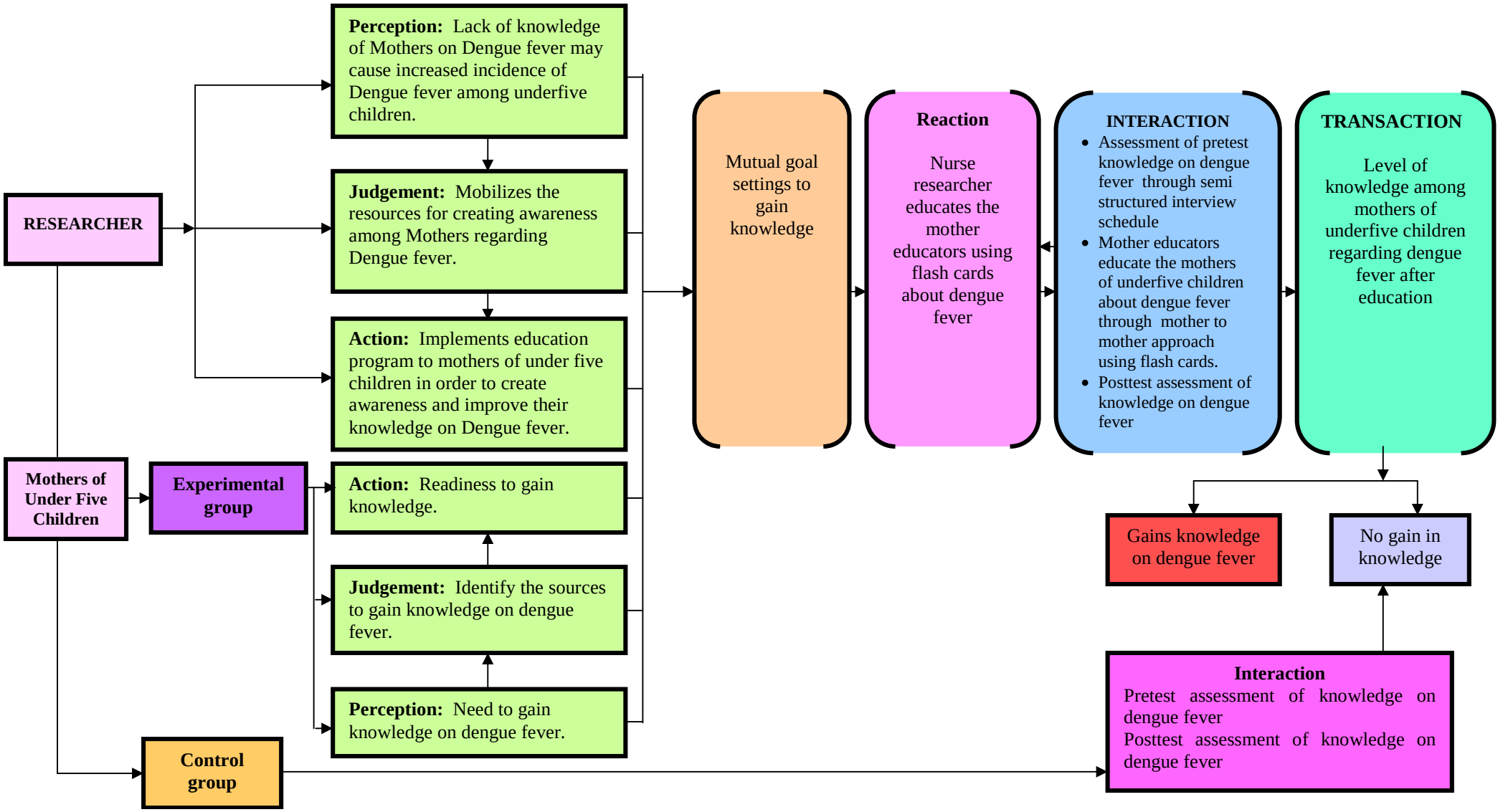

Figure- 1.1: Conceptual Frame Work Based on Modified Imogene King Goal Attainment Theory to Assess the Effectiveness of Mother to Mother Approach on Knowledge Regarding Dengue Fever Among Mothers of Underfive Children

Summary:

This chapter dealt with introduction, need for the study, statement of the problem, objectives, operational definitions, assumption, hypothesis, delimitation, projected outcome and conceptual framework.

CHAPTER – II

REVIEW OF LITERATURE

A literature review involves the systematic identification, location, scrutiny and summary of written materials that contain information on a research problem. **(Polit and Hungler, 2008)**

The literature review was collected theoretically and empirically. It was organized under the following as,

Review related to,

I. Studies regarding incidence and prevalence of dengue fever.

II. Literature related to mother to mother approach.

III. Studies related to mother to mother approach.

IV. Studies related to knowledge and practice on prevention of dengue fever.

I. Review related to studies regarding incidence and prevalence of dengue fever:

A study was conducted to assess the incidence of dengue hemorrhagic fever among children in Tamil Nadu, India. The sample size was 90 children aged between 0 to 12 years admitted to medical ward with the history of acute febrile illness in Adhiparaskthi hospital, Melmaruvathur .Blood sample were analyzed for hematologic parameters like platelet count and Serological diagnosis of dengue fever was done by IgG, IgM and ELIZA. Out of 90 children screened, 41(45.5%) were positive for dengue fever. Among them, 16(39%) had dengue fever and 25(61%) had dengue hemorrhagic fever. The common clinical manifestations among children with dengue hemorrhagic fever were thrombocytopenia (96%), elevated aminotransferase (96%), abdominal pain (92%) and hepatomegaly (92%).This study concludes that differentiating dengue hemorrhagic fever from dengue fever based on the warning

symptoms and hematological parameters, is essential for optimum management of children. **(Sankari , 2013)**

A study was conducted at Centre for Research in Medical Entomology (ICMR), Madurai to assess the incidence of dengue fever among children in three villages of Kanyakumari district in Tamilnadu, India. Serological, virological and entomological investigations were carried out. 76 plasma samples were collected from suspected cases of dengue fever. The findings revealed that 20% of the samples were found positive for dengue virus specific IgM antibodies. Virological survey detected dengue virus seroptype-3.Entomological survey revealed the presence of abundance Aedes mosquitoes in the study areas**. (Mic, et.al, 2013)**

A retrospective study was done to assess the incidence of dengue fever over five years from 1999 to 2003 in Vellore district, Tamil Nadu. Serum samples were collected from 1387 individuals in Government hospitals over five year were tested for dengue specific IgM antibodies. Among the 1387 patients, 693 were adults more than15years and 694 children less than 15 years. The result found that a total of 423 (29.7%) samples were positive for dengue IgM over five year period. Overall, there was a significant increase in the percentage of dengue IgM positive individuals over this period (P<0.001).When the individuals were grouped into children less than 15 years and adults, a significant increase in the number of dengue IgM positive individuals was noticed only in children (P<0.001). The study concludes that overall significant increase in dengue IgM seropositivity among the suspected cases indicates dengue is emerging or re-emerging as a major health problem in southern India**.**

(Chandy Sara, 2012)

A prospective study was conducted to assess the incidence of dengue hemorrhagic fever among children in New Delhi, India. The study included 110

children less than 15 years of age who were hospitalized with dengue haemorrhagic fever (DHF) in 2 public hospitals. Among them 48 (43.6%) were grade I, 40 (36.4%) grade II, 10 (9.1%) grade III and 12 (10.9%) grade IV DHF. Dengue shock syndrome (DSS) was seen in 22 (20%) children. Fever, headache, myalgias and arthralgias were the common symptoms seen in 100%, 80.9%, 76.2% and 52.3%children respectively. Spontaneous bleeding was seen in 62 (56.4%) and gastrointestinal bleeding was seen in 38 (34.5%) children.55 children (50%) required platelet transfusions and 12 children died, giving a mortality rate of 10.9% in the present study. The study concludes that Prompt recognition and supportive treatment can be lifesaving. **(Wali JP, 2012)**

A study to determine dengue incidence and disease burden by passive fever surveillance for febrile illness was conducted among 22,199 persons living in an urban slum area of Kolkata, India. Among all identified febrile persons, a sample of 2,000 was enrolled following informed consent, for collection of acute and convalescent serum samples for dengue laboratory testing .A total of 1326 persons were identified with febrile illness, 1053 from out- patient and 273 from in patients of Kolkata municipality hospital.1048 outpatients with fever for less than 7 days at the time of blood collection were tested for IgM anti –DENV. Among them, 84 (8.01%) were found IgM anti-DENV positive by test kit. 40 (47.6%) dengue positives were less than 15 years of age. This study suggests that dengue is the substantial cause of febrile illness in Kolkata. **(Kabir, et.al, 2011)**

A prospective study was done on cases of febrile illness reporting at Institute of Social Pediatrics, Government Stanley Medical College, Chennai district, Tamilnadu in 2012.89 children with acute febrile illness with one of the following myalgia, headache, retro-orbital pain, bleeding, altered sensorium, shock and low

platelet count were registered and rapid IgM-IgG capture ELISA test was done. 59 seropostive cases were identified during the study period of which 5 were Dengue shock syndrome, 11 were Dengue hemorrhagic fever, 23 were Dengue fever with unusual bleeding and 20 were Dengue fever. The age group of the affected children was between 7 months to 12 years (mean 6.76, SD 3.19). DSS occurred at a lower age group than other complications of dengue fever, but the difference was not statistically significant (P = 0.27).Manifestations of dengue fever were equally common between the both sexes. Most common presentations were fever (98.3%), vomiting (83.0%), bleeding manifestations (66%) and myalgia (54.2%). The mean duration of fever at the time of admission to the hospital was 4 days (SD = 2.3). The average duration of fever was lesser in the DSS group though the difference was not statistically significant (P = 0.26).The study concludes that endemicity of dengue fever is increasing in India. (**Narayanan Manjith, 2008)**

II. Review related to literature regarding mother to mother approach:

Mother to mother approach is the term widely used to describe the range of initiative where peoples of similar age group, socio- cultural back ground and economic status educate each other about a variety of issues. It is a interactive process in which the emotional concern, instrumental aids, information and appraisal is obtained to improve the health care seeking behavior of mother to improve the health care practices.**(Sylvia Juliet, 2008)**

The rationale behind this approach is that the mothers are more trusted credible source of information, as they share similar experiences and social norms and therefore they are the better person to provide relevant, meaningful, explicit and honest information to another mother. In this approach the mothers naturally communicates with each other in meaningful way, so the mothers can easily

understand complicated health messages if the messenger is a mother too. It is an approach which empowers mothers to work with other mothers and which draws the positive strength of the group. **(Jarrett Marian, 2009**)

Benefits of mother to mother approach are the mother educator communicates readily in a understandable way and act as a positive role model while dispelling misperception. The mothers are more likely to engage in interactive discussion following the dissemination of the information, it produces a great attitude change among the mothers. Mothers learn important skills like facilitation and communication. They also acquire adequate knowledge related to health issues. **(Paul Monica, 2006)**

Steps in developing Mother to mother approach education programme includes: Identifying the target group: A education programme is developed according to the characteristics and needs of the target group. Identification of the target group is based on content that is delivered and the type of activities to be included in the programme. Need assessment: In order to design an education program it is important to determine the current knowledge, attitude, values and practice of target group related to the specific health issues. Determine the aims of education: The aims of the education programme should be clear, achievable, measurable and relevant. They are: To increase the target group's knowledge, to change the target group's attitude, to change the target group's practice and to enhance the target group's skill at dealing with specific issues. Recruiting the mothers: Mother's recruitment depends upon certain factors like age range, wide friendship network, respect within their group, good communication skills, motivation and confidence. Training of mother educator: Ensuring they are aware of the aims, objectives, methods and content of education programme, increasing their knowledge

about the related health issue, changing their attitude regarding the health issue increasing their confidence in passing the health message to their friends and improving their communication skill. Implementation of programme: Mother to mother education program can range from formal communication method to informal communication method. Program evaluation: Evaluation can be done by using questionnaires or interview schedules usually before and after the program to assess the changes in knowledge, attitude, practice related to the specific health issue among the mothers. **(Betsy, 2010)**

III. Review related to studies regarding mother to mother approach:

A qualitative study was conducted to assess the effectiveness of " Mother-to-Mother program" or "Mentor Mother" program by providing support and advice to HIV positive pregnant women and mothers of HIV exposed babies in 2 urban districts of Bulawayo and Zimbabwe from 2009 to 2012. The Sample size was 72 HIV positive mothers and 14 mentor mothers. HIV positive pregnant women were enrolled at antenatal booking or at delivery to mother to mother program. In-depth interviews is the tool used for data collection. The mentor mothers visited at least four women in a week and spent six hours with each woman. Specific activities under the mother to mother mentorship initiative included health education regarding HIV and STD prevention, health care practices including safer sex practices, birth planning, infant feeding counseling and mothers support based on knowledge of HIV status and HIV adherence counseling. The result suggest that beneficiary mothers observed to have high level of knowledge (99%, $p<0.0005$) and have higher adherence to prevention of Mother to Child Transmission (PMTCT) guidelines. **(Shroufi Amir, et.al, 2013)**

An operations research was conducted to assess the effectiveness of using group of mothers to educate mothers having children less than 3 years of age about

primary health care by the Ministry of Health and Welfare in Maldives during 2006 to 2007. The study aimed to improve mothers' knowledge regarding antenatal care, family planning, diarrheal disease, immunization, use of growth cards in growth monitoring and communicable disease control. The sample size was 180 mothers. A two stage cluster sampling method was used to select the sample. A pre- tested, structured questionnaire was used for data collection. Family health worker taught six mothers in experimental group. Those six mothers were recruited as permanent group leaders, and they formed successive sets of six mothers groups until 90 mothers had been taught. The result suggest that scores of knowledge on the six topics doubled among mothers in the experimental group, while those of mothers in the control group showed little change. The mean score of knowledge increased from 26% to75% ($p=0.001$) among mothers in the experimental group and from 40% to 47% among mothers in the control group **(Yoosuf, 2009)**

A study to assess the effectiveness of mother to mother project to promote oral rehydration therapy among mothers of underfive children in158 communities of Hidalgo and Veracruz in Mexico from 2006-2008. The project trained 221 community health aids and supervisors from 47 maternal and child health units. Mothers who are visiting underfive clinics were enrolled. A self administered questionnaire is the tool used for data collection .The sample size was 1,730 mothers. The result suggest that the mean post test knowledge scores of mothers regarding oral rehydration therapy increased from 25.5% to 68% ($p<0.00001$) after mother to mother project. **(Ciclope, 2009)**

A quasi experimental study was conducted to assess the effectiveness of mother to mother approach in disseminating the information on ideal disciplinary standards among the mothers of preschool children in Kabir nagar village at Madurai.

Purposive sampling technique was used to select 60 mothers of preschool children. Structured interview schedule is the tool used for data collection. Initially the information regarding ideal disciplinary standards was taught by the researcher to 30 mothers (primarily informed mothers) individually. Following that the researcher made primarily informed mothers to teach another 30 mothers (secondarily informed mothers) individually. The result suggest that the mean post test knowledge score of primarily informed mothers (92.96) is higher than the mean pre test knowledge score (50.53) and 't' value is 40.40($p \leq 0.05$).The mean post test knowledge score of secondary informed mothers (90.93) was higher than the mean pretest knowledge score(52.53) of secondarily informed mothers and the 't' value is 49.23($p \leq 0.05$). **(Sylvia Juliet, 2008)**

IV. Review related to studies regarding knowledge and practice on prevention of Dengue fever:

A survey was carried out to assess the community's knowledge, attitude and practice on dengue fever (DF), following the major dengue outbreak in Chennai, Tamilnadu in 2012. A pre-tested, structured questionnaire was used for data collection. Multistage cluster sampling method was employed and 640 households (HHs) were surveyed. The result depicted that 34.5% of households were aware of dengue fever and only 3.3% of households knew that dengue virus is the causative agent for dengue fever. Majority of the households (86.5%) practiced water storage and only 3% of them stored water more than 5 days. No control measures were followed to avoid mosquito breeding in the water holding containers by majority of households (65%). The survey results concludes that the community's knowledge was very poor regarding dengue fever and its transmission, vector breeding sources,

biting behavior of Aedes mosquitoes and its preventive measures. **(Ashok Kumar.V, 2012)**

A Cross-sectional study was conducted to assess the differences in knowledge and practices regarding dengue fever among persons visiting a tertiary care hospital in New Delhi, India. A systematic sampling procedure was adopted and a pretested questionnaire was used for data collection. A total of 215 individuals were interviewed. The result indicates that majority of the respondents (96.3%) had adequate knowledge regarding dengue fever. The important sources of information were television (54.9%) and newspaper/magazines (51.7%). Around 89% of the study participants considered dengue fever as "serious problem". Nearly 86% participants were aware of spread of dengue fever by Aedes mosquitoes. Mosquito mats and liquidators were used by 61% of respondents, coils by 56% and repellent creams by 22%.The study concludes that awareness regarding dengue fever and mosquito control measures was satisfactory. **(Chinnakali .P, 2012)**

A cross sectional study was conducted to assess the knowledge and practice of dengue control among the semi-urban towns in Kolalumpur, Malaysia. A structured questionnaire containing questions related to dengue fever and its prevention is the tool used. The result illustrate that almost all of the respondents (95%) had heard about dengue and about half (50.5%) had misconceptions that Aedes mosquitoes can breed in dirty water. On household survey only 44.5% of people had covered their water containers properly. Significant associations was found between knowledge scores of dengue fever and age (P = 0.001), education level (P = 0.001), marital status (P = 0.012) and occupation (P = 0.007). The results suggest that knowledge regarding dengue fever is inadequate among participants. **(Naing.C, 2011)**

A hospital based study was conduct to assess knowledge and practice regarding dengue fever among patients in the out patient department of Safdarjang hospital, New Delhi. Random sampling procedure was adopted and a pretested questionnaire was used for data collection. A total of 500 individuals were interviewed in 28 days. The result suggest that 82.4 % respondents knew that dengue fever is transmitted by mosquito, 56 (11.2%) persons could enumerate 3 symptoms of dengue fever.399(79.8%)of respondents have adequate knowledge regarding breeding place of mosquitoes.326(65.2%) respondents were having redundant tires, plastic pot and flower pots on roof top or in their houses. Regarding personal protective measures against mosquito bite 386(77.2%) respondents were relaying upon mats\ coils and 101(20.2%) were using bed nets. The study concludes that although knowledge regarding dengue fever is adequate among participants practice of checking coolers, flower pots and tires is quite poor.(**Matta.s,2006)**

A study was done to explore the extent of dengue-related knowledge among caregivers in Thaketa township, Myanmar. The sample size was 405 respondents aged 18 years and above. The findings were triangulated from the results of personal interviews, focus group discussions and observational checklist. The result found that almost 60% of the interviewees had received information regarding DHF by watching television. Females with more than six years of schooling, persons who had access to pamphlets/posters, television, newspapers and journals got higher scores than the unexposed group. Less than 15% were not exposed to any of the IEC materials. Aedes aegypti larvae were found in 67% of water storage tanks and 15.9% of flower vase. Focus group discussions were held for drafting IEC materials. The study concludes that a low practice score was observed in those with high knowledge level, which

means that high knowledge does not necessarily lead to high practice (P<0.05). **(Win KhynnThan, 2004)**

Summary:

This chapter dealt with review of literature related to mother to mother approach, studies related to mother to mother approach, studies related incidence and prevalence of dengue fever and studies related knowledge and practice on prevention of dengue fever.

CHAPTER-III

METHODOLOGY

The methodology of research indicates the general pattern of organizing the procedure for gathering valid data for the purpose of investigation. **(Polit and Hungler, 2003)**

Research Approach:

A research approach is the whole design, including the researcher's assumptions, the process of inquiry, the type of data collected and the meaning of the findings. The quantitative approach to research involves the use of data collection methods such as questionnaires, structured observations, structured interviews and a number of other measuring tools. **(Parahoo Kader, 2006)**

The research approach adopted in this study was quantitative evaluative research approach.

Research Design:

The over all plan for addressing a research question, includes specification for enhancing the studies integrity. **(Polit .F. Denis, 2004)**

The research design chosen for this study was quasi experimental (pre test and post test with control group) design

E	**O_1**	**X**	**O_2**
C	**O_1**		**O_2**

Key:

E : Experimental Group

C : Control Group

O_1 : Pre-test.

X : mother to mother approach.

O_2 : Post-test.

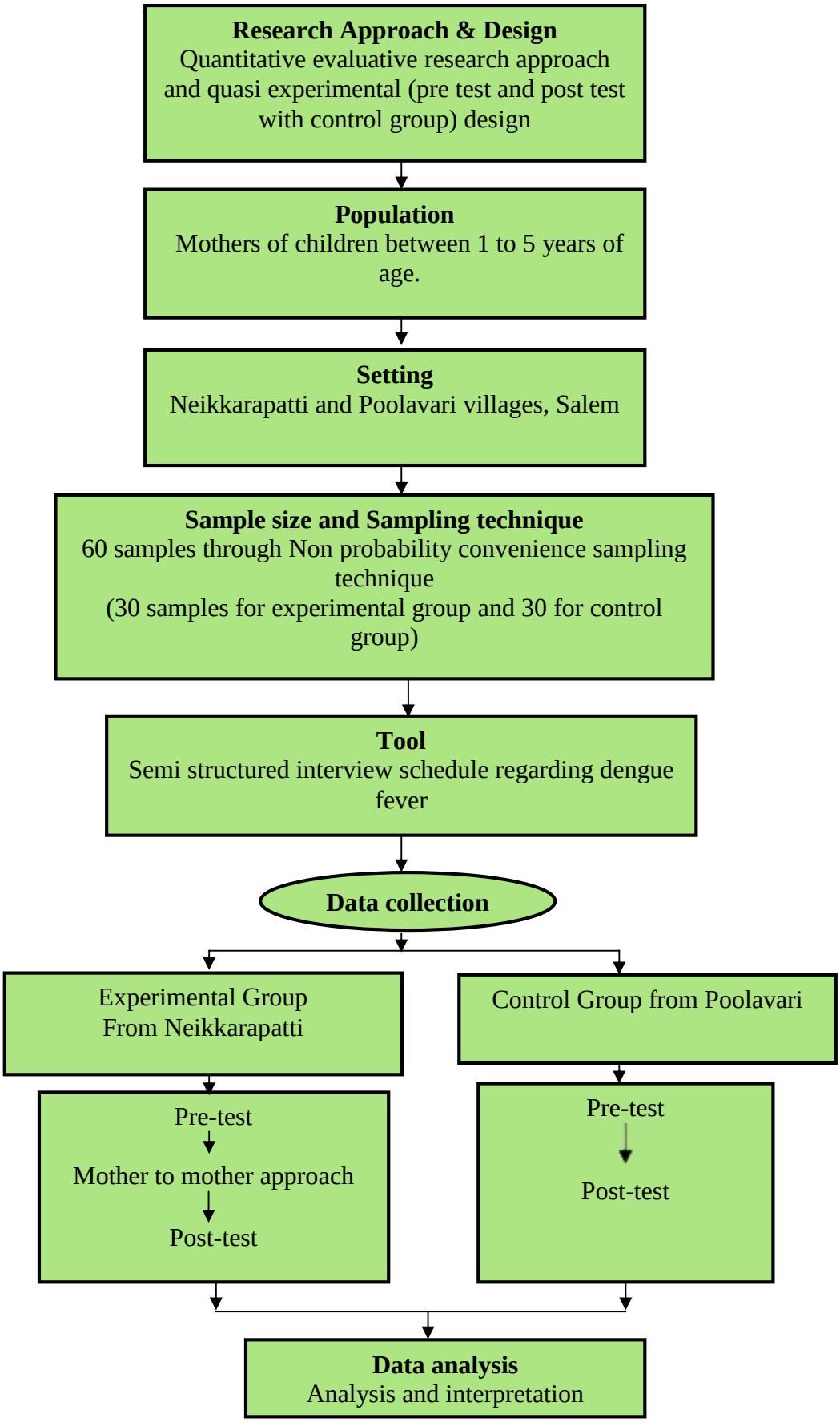

Figure-3.1: Schematic Representation of Research Methodology

Population:

The entire set of individuals having some common characteristics, sometimes called universe. **(Polit .F. Denise, 2004)**

The population of the study is all the mothers who is having children between 1 to 5 years of age in selected village.

Description of Setting:

The study was conducted in Neikkarapatti and Poolavari, Salem. The control group setting is Poolavari. It is 2 km away from Sri Gokulam College of Nursing and the experimental group setting is Neikkarapatti. It is 4 Km away from Sri Gokulam College of Nursing. The areas were selected based on availability of subjects economy of time and money access, feasibility in terms of co operation given by mothers of under five children in Neikkarapatti and Poolavari, Salem.

Sampling:

The process of selecting a portion of the population to represents the entire population. **(Polit. F. Denise, 2004)**

- **Sample:**

  A subset of a population, selected to participate in a study. **(Polit. F. Denise, 2004)**

  The sample of the study comprises of mothers of children between 1 to 5 years of age who fulfill the inclusion criteria in the selected villages.

- **Sampling Technique:**

  Non probability convenience sampling technique was adopted for selecting the samples for the study.

- **Sample Size:**

Sample size consisted of 60 mothers of underfive children. In those 30 mothers for experimental group and 30 mothers for control group were chosen from the selected villages, Salem.

Criteria for sample selection:

Inclusion criteria:

- ❖ Mothers of underfive children.
- ❖ Mothers who could understand and speak Tamil.

Exclusion criteria:

- ❖ Mothers who are not available at the time of data collection.
- ❖ Mothers who are not willing to participate in the study.

Variables:

- ❖ **Independent**: Mother to mother approach educational method on dengue fever.
- ❖ **Dependent**: Knowledge regarding dengue fever among mothers of underfive children.

Description of the Tool:

With the investigator personal and professional experience and after extensive review of literature and discussion with expert, a semi structured interview schedule developed for data collection. It consists of two sections.

Section-I: Demographic variables:

The demographic profile consists of 9 items such as age, education, occupation, type of family, religion, monthly income, number of children, number of underfive children and previous information regarding dengue fever and source of information.

Section-II: Semi structured Interview schedule to assess the level of knowledge regarding Dengue fever among mothers of underfive children:

The tool consisted of 29 questions under 5 headings namely knowledge related to general aspects of dengue fever, causes, clinical manifestations, preventive measures, care of child with dengue fever. Each item has 3 options.

Scoring Key:

Total score is 29

Each correct response carries 1 mark.

Each wrong response carries 0 mark.

Table- 3.1: Interpretations of the level of knowledge regarding dengue fever

Level of knowledge	Marks	Percentage
Inadequate	0 – 9	0 –49 %
Moderately adequate	10 – 19	50 – 74%
Adequate	20 – 29	75 – 100%

Validity and Reliability:

Validity:

Validity of the tool was obtained from 5 experts in the field of Child Health Nursing, a pediatrician and community medicine consultant. The tools were found adequate and minor suggestions given by the experts were incorporated.

Reliability:

Reliability was established by using Test retest method. The investigator selected 5 mothers of underfive children from Uthamasolapuram village on 14-7-13 and administered the semi structured interview schedule regarding dengue fever. Re-

test was conducted on 19-7-13.The reliability value was r = 0.9 which revealed that the tool was reliable.

Pilot Study:

A formal permission was obtained from Panchayat President of Uthamasolapuram village. Pilot study was conducted from 22-7-13 to 27-07-13. The investigator selected 6 mothers of underfive children in experimental group and 5 mothers in control group using non probability convenience sampling technique on 22-7-13 and conducted pretest using the semi structured interview schedule regarding dengue fever. Based on the pre test scores the top scored mother in experimental group was selected as mother educator and she was taught about dengue fever by the investigator with the help of flash cards. In turn the mother educator taught other 5 mothers in experimental group under the supervision of investigator about dengue fever using flash card. Post test was conducted for experimental group and control group 27-7-13. The findings of the pilot study revealed the feasibility of proceeding to the main study.

Method of Data Collection:

Ethical consideration:

Written permission was obtained from the Panchayat President of Neikkarapatti and Poolavari to conduct the study. Informed oral consent was taken from mothers who were willing to participate in this study.

Data collection procedure:

Pre test:

Data collection was done from 29-7-13 to 27-8-13. The investigator personally visited the selected villages. Good rapport was maintained with the mothers. The investigator selected 36 mothers of underfive children from Neikkarapatti through non

probability convenience sampling technique and conducted pre test with the help of the semi structured interview schedule to assess their level of knowledge regarding dengue fever on 30-7-13 and 31-7-13. Six mothers with top scores in pretest were selected as mother educators, remaining 30 mothers were assigned as samples to experimental group. Thirty mothers of under five children from Poolavari were selected as control group and pre test was conducted on 15-8-13 and 16-7-13.

Mother to mother approach education:

The six top scorers of the pre test in the experimental group were selected as the mother educators. Education regarding dengue fever was given to the mother educators by the investigator with the help of flash cards. Then the mother educators were asked to teach other mothers in the experimental group using flash cards under the supervision of the investigator. Each day one mother educator taught 5 mothers in experimental group for 40 minutes duration. The education was given to 30 mothers in six consecutive days from 1-8-13 and 6-8-13.

Post test:

Post test was conducted on the 8th day of intervention from 9-8-13 and 14-8-13 for experimental group and for control group on 23.08.13 and 24.08.13.

Planned Data Analysis:

The data collected, arranged, tabulated. Descriptive statistics such as percentage, mean and standard deviation was used to categorizing the data. Inferential statistics such as paired and unpaired 't' test was used to find out the effectiveness of mother to mother education and chi-square test was used to find the association between the level of knowledge with their selected demographic variables.

Summary:

This chapter consists of research approach, research design, population, description of the setting, sampling, variables, and description of the tools, validity, reliability, pilot study, method of data collection and plan for data analysis.

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

Analysis is the process of organizing and synthesizing data in such a way that research question can be answered and hypothesis tested. **(Polit & Hungler, 2003)**

This chapter deals with analysis and interpretation of data collected to evaluate the effectiveness of mother to mother approach on knowledge regarding dengue fever among mothers of underfive children in Salem.

The findings are presented under the following sections

Section-A:

Distribution of mothers according to their demographic variables in experimental and control group.

Section-B:

Distribution of mothers according to the pre test level of knowledge regarding dengue fever in experimental and control group.

Section-C:

a) Distribution of mothers according to the post test level of knowledge regarding dengue fever in experimental and control group.
b) Comparison of pre and post test level of knowledge score regarding dengue fever among mothers of underfive children in experimental and control group.
c) Comparison of area wise mean, SD, mean percentage & difference in mean percentage of pre and post test knowledge score regarding dengue fever among mothers of underfive children in experimental group.

Section-D: Hypotheses Testing

a) Difference between pre test and post test level of knowledge score regarding dengue fever among mothers of underfive children in experimental group at $P<0.001$ level.

b) Effectiveness of mother to mother approach on post test level of knowledge score regarding dengue fever among mothers of underfive children in experimental group and control group at $P<0.05$ level.

c) Association between the post test level of knowledge scores regarding dengue fever among mothers of underfive children with their selected demographic variables in experimental and control group at $P<0.05$ level.

Section - A

Distribution of mothers according to their demographic variables in experimental and control group.

Table – 4.1:

Frequency and percentage distribution of mothers according to their personal variables in experimental and control group.

n = 60

S. No	Personal variables	Experimental group n=30		Control group n=30	
		f	%	f	%
1.	**Age of the mother (in years)**				
	1.1) 20 – 25yrs	14	46.7	17	56.7
	1.2) 26 – 35yrs	14	46.7	11	36.7
	1.3) 36 above	2	6.67	2	6.67
2.	**Education**				
	2.1) Graduate and above	1	3.33	2	6.67
	2.2) Pre degree	4	13.33	2	6.67
	2.3) High school	9	30	9	30
	2.4) Middle school	4	13.33	3	10
	2.5) Elementary school	8	26.67	7	23.4
	2.6) No formal education	4	13.33	7	23.4
3.	**Occupation**				
	3.1) House wife	25	8.43	20	66.67
	3.2) Daily wages	3	10	6	20
	3.3) Private employee	-	-	2	6.67
	3.4) Government employee	-	-	1	3.33
	3.5) Business	2	6.67	1	3.33
4.	**Religion**				
	4.1)Hindu	29	96.67	30	100
	4.2)Christian	1	3.33	-	-
	4.3)Muslim	-	-	-	-
5.	**Previous knowledge regarding dengue fever**				
	5.1) Yes	4	13.33	4	13.33
	5.2) No	26	86.67	26	86.7

Distribution of mothers in experimental and control group according to their age shows that more or less similar percentage of mothers 14(46.7%) in experimental group and 17(56.7%) in control group belong to 20 – 25 years of age and more or less similar percentage of mothers 14(46.7%) in experimental group and 11(36.7%) in control group belong to the age group of 26 – 35 years and similar percentage 2(6.67%) mothers in experimental group and 2(6.67%) mothers in control group belong to the age group of 36 years above. This reveals that most of the mothers in experimental and control group belong to 20 – 35 years of age (Table 4.1).

Distribution of mothers in experimental and control group according to their education shows that similar and highest percentage of mothers 9(30%) in experimental group and 9 (30%) in control group had studied up to high school. However more or less similar percentage of mothers 8 (26.67%) in experimental group and 7(23.4%) control group had studied up to elementary school education and 4(13.33%) in experimental group and 7(23.4%) in control group are illiterates. More or less similar percentage of mothers 4(13.33%) in experimental group and 3(10%) in control group had middle school education and 4(13.33%) in experimental group and 2(6.67%) in control group had pre-degree education. Further the lowest percentage of mothers 1 (3.33%) in experimental group & 2(6.67%) in control group are graduates. This shows that a highest percentage of mothers had studied up to high school in both experimental and control group (Table 4.1).

Distribution of mothers according to the occupation shows that most of mothers 25(83.4%) in experimental group & 20(66.67%) in control group are housewives and 3(10%) in experimental and 6(20%) in control group are working for daily wages and 2(6.67%) mother in control group was private employee. Similarly 1(3.33%) mother in control group was Government employee. The lower percentage of mothers

2(6.67%) in experimental group and 1(3.33%) in control group are doing own business. This shows that majority of mothers in experimental and control group was housewives (Table 4.1).

Distribution of mothers in experimental group and control group according to their religion shows that more or less similar percentage of mothers 29(96.67%) in experimental group ad 30(100%) in control group are Hindu, further the lowest percentage of mothers 1(3.3%) in experimental group belong to Christianity (Table 4.1).

Distribution of mothers according to their previous knowledge regarding dengue fever indicates that majority of mothers 26(86.7%) in experimental group and 26(86.7%) in control group do not have any previous knowledge regarding dengue fever, whereas 4(13.33%) mothers in experimental group and 4(13.33%) mothers in control group has previous knowledge regarding dengue fever. This unveils that most of the mothers in both experimental and control group do not have previous knowledge regarding dengue fever (Table 4.1).

Distribution of mothers according to their source of information regarding dengue fever in experimental and control

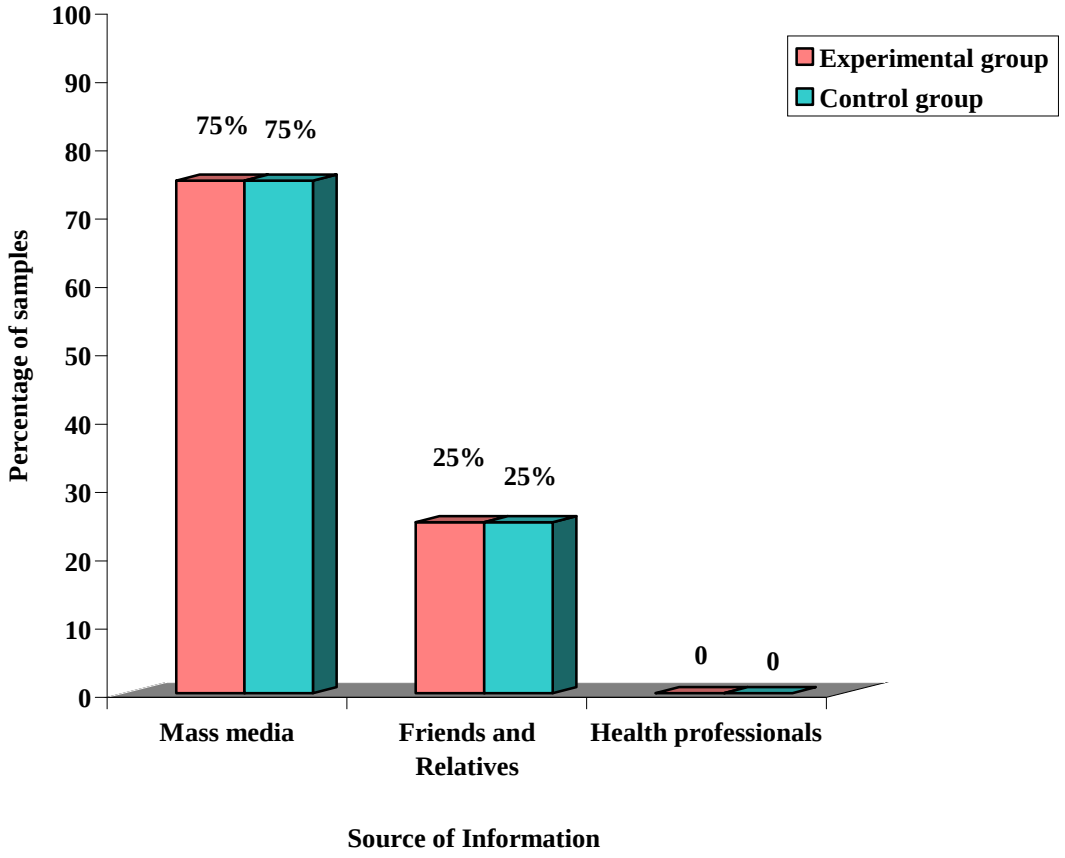

Figure-4.1: Frequency and percentage distribution of mothers according to their source of information regarding dengue fever in experimental group and control group.

Further analysis of mothers having previous knowledge regarding dengue fever (n= 4). Shows that similar and higher percentage 3(75%) of mothers both in experimental group and control group gained knowledge through mass media and lowest and similar percentage of mothers both in experimental and control group1(25%) gained knowledge from friends and relatives.

Table – 4.2:

Frequency and percentage distribution of mothers according to their family related variables in experimental and control group.

n=60

S. No	Family related variables	Experimental group n=30		Control group n=30	
		f	%	f	%
1.	**Type of family**				
	1.1) Nuclear family	18	60	27	90
	1.2) Joint family	12	40	3	10
	1.3) Extended family	-	-	-	-
2.	**Monthly income**				
	2.1) Less than Rs.5000	22	73.33	16	53.4
	2.2) Rs.5000 to Rs.10,000	6	20	13	43.3
	2.3) Above Rs. 10,000	2	6.67	1	3.33
3.	**Number of children**				
	3.1) One	8	26.67	15	50
	3.2) Two	15	50	11	36.7
	3.3) Three and above	7	23.4	4	13.3
4.	**Number of underfive children**				
	4.1) One	21	70	21	70
	4.2) Two	9	30	8	26.67
	4.3) Three and above	0	0	1	3.33

Distribution of mothers according to the type of family reveals that majority of mothers 18(60%) in experimental group and 27 (90%) in control group belong to nuclear family, however 12 (40%) mothers in experimental group and 3(10%) mothers in control group belong to joint family. This unveil that most of the mothers belong to nuclear family in both experimental and control group (Table 4.2).

Distribution of mothers according to the family income per month reveals that majority of mothers 22(73.33%) in experimental group and 16 (53.4%) in control group belong to the income group of less than Rs.5000 per month, and 6(20%) in experimental group and 13 (43.3%) in control group belong to the income group of Rs.5000-Rs.10,000 per month. However more or less similar percentage of mothers 2(6.67%) in experimental group and 1(3.33%) in control group belong to the income group of above Rs.10,000 per month. This reveals that majority of mothers belong to low income group in both experimental and control group (Table 4.2).

Distribution of mothers according to the number of children reveals that the majority of mothers 15(50%) in experimental group and 11(36.7%) in control group have two children. 8(26.67%) mothers in experimental group and 15(50%) mothers in control group have only one child, however 7(23.4%) mothers in experimental group and 4(13.3%) mothers in control group have three children and above. This unveil that most of the mothers have two children in both experimental and control group (Table 4.2).

Distribution of mothers according to the number of underfive children reveals that similar and majority of mothers 21(70%) in experimental group and 21(70%) in control group have only one underfive children and 9(30%) in experimental group and 8(26.67%) in control group have two underfive children. This unveil that most of the mothers have only one underfive children in both experimental and control group (Table 4.2).

Section-B

Distribution of mothers according to their pretest level of knowledge regarding dengue fever in experimental and control group.

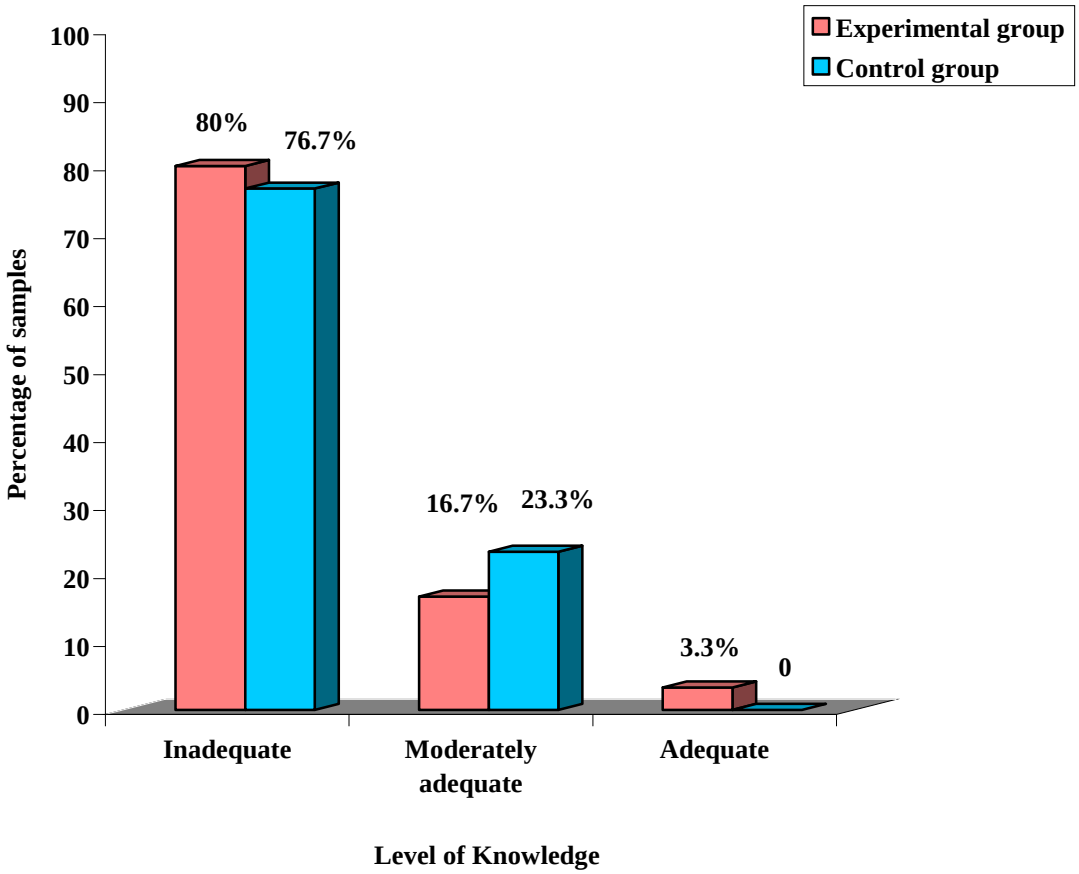

Figure-4.2: Frequency and percentage distribution of mothers according to their pretest level of knowledge regarding dengue fever in experimental group and control group.

The above figure shows that most of the mothers 24 (80%) in experimental group and 23(76.7%) in control group had inadequate knowledge whereas 5 (16.67%) in experimental group and 7(23.3%) in control group had moderately adequate knowledge and 1(3.3%) in experimental group had adequate knowledge regarding dengue fever during pretest. This highlights that most of the mothers had inadequate knowledge and they are in need of information regarding dengue fever.

Section-C

a) Distribution of mothers according to their post test level of knowledge regarding dengue fever in experimental and control group.

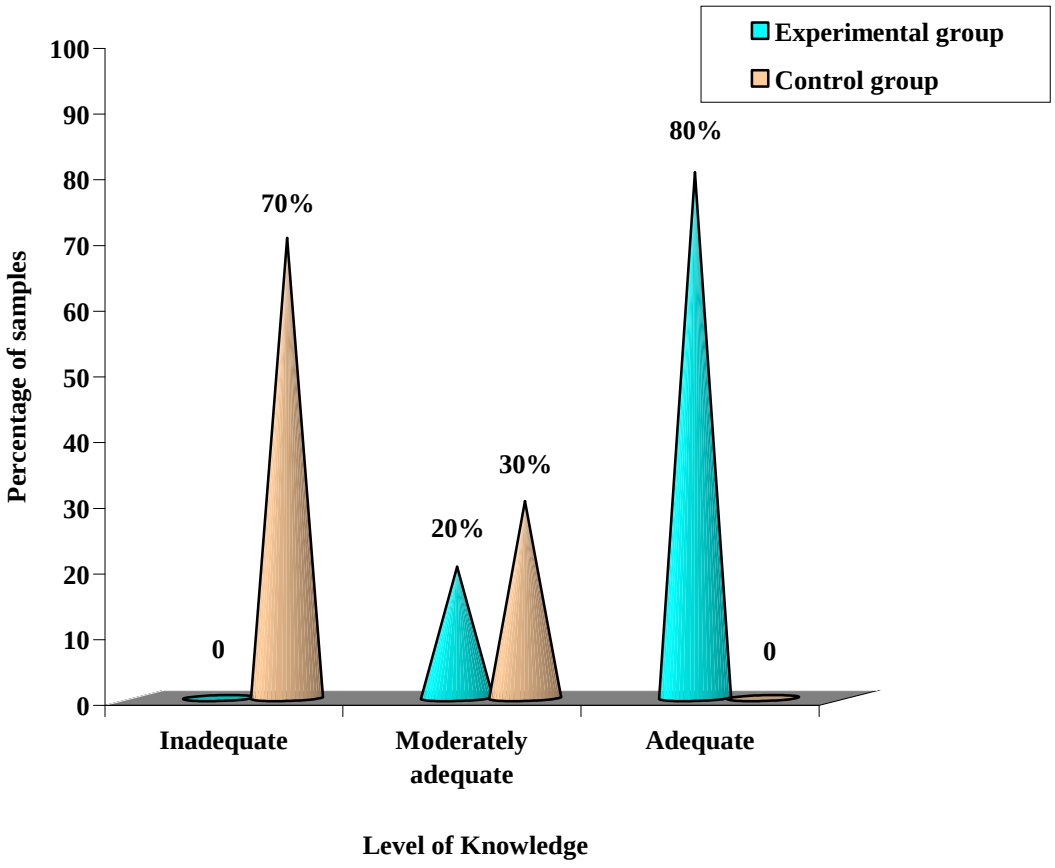

Figure-4.3: Frequency and percentage distribution of mothers according to their post test level of knowledge regarding dengue fever in experimental and control group.

The above figure shows that most of the mothers 24(80%) in experimental group had adequate knowledge and 21(70%) in control group had inadequate knowledge whereas 6(20%) in experimental group and 9(30%) in control group had moderately adequate knowledge during post test. This highlights that most of the mothers in experimental group had acquired adequate knowledge regarding dengue fever after mother to mother approach.

b) Comparison of pre test and post test level of knowledge regarding dengue fever among mothers of underfive children in experimental and control group

Table-4.3:

Frequency and percentage distribution of mothers according to their pre test and post test level of knowledge regarding dengue fever in experimental and control group.

n= 60

S. No	Level of knowledge	Experimental group (n=30)				Control group (n=30)			
		Pre-test		Post-test		Pre-test		Post-test	
		f	%	f	%	f	%	f	%
1	Inadequate	24	80	-	-	23	76.7	21	70
2	Moderately adequate	5	16.67	6	20	7	23.3	9	30
3	Adequate	1	3.3	24	80	-	-	-	-

The above table shows that most of mothers 24 (80%) in experimental group and 23 (76.7%) in control group had inadequate knowledge during pre test. However during post test most of the mothers 24 (80%) in experimental group and none of the mothers in control group had adequate knowledge. Further none of the mothers in experimental group and 21 (70%) of mothers in control group had inadequate knowledge during post test. It seems that the knowledge of the mothers in experimental group regarding dengue fever has improved after educating through mother to mother approach.

c) Comparison of areas wise mean, SD, mean percentage & difference in mean percentage of pre and post test knowledge score regarding dengue fever among mothers of underfive children in experimental group.

Table:-4.4:

Areas wise mean, standard deviation, mean percentage and difference in mean percentage of pre and post test knowledge score regarding dengue fever among mothers of underfive children in experimental group.

(n =30)

Areas	Max. score	Experimental group						
		Pre-test			Post-test			Difference in mean score %
		Mean	SD	Mean score %	Mean	SD	Mean score %	
General aspects	3	1.16	0.90	38.67	2.93	0.29	97.6	58.93
Causes	7	1.93	1.12	27.57	6.23	1.05	89.4	61.83
Signs/ symptoms	**3**	**0.43**	**0.36**	**14.33**	**2.63**	**0.76**	**87.6**	**73.27**
Prevention	9	2.36	2.04	26.22	8.13	1.11	90.3	64.08
Care of child with fever	7	2.16	1.22	30.85	5.83	1.69	83.3	52.45
Over all	29	8.067	4.566	27.81	25.8	4.25	88.96	61.15

The above table shows that during post test higher percentage of mean score (2.93±0.29) which is 97.6% of the maximum score obtained in the area of “General

aspects", whereas the pre test mean score is 1.16±0.90 which is 38.67% of maximum score obtained in the same area, revealing a lowest difference in mean percentage (58.93%). However, the maximum score is only 3.

Further, the highest difference in mean score percentage (73.27%) is obtained in the area of "signs and symptoms" which might be due to a higher post test mean score(2.63 ± 0.76) which is 87.6% and a lowest pretest mean score (0.43±0.36)which is 14.33%. Further, the overall post test mean score is (25.8 ±4.25) which is 88.96% and the pre test mean score is (8.067±4.566) which is 27.81% with a difference in mean score percentage of 61.15%.

It reveals that mother to mother approach was most effective in the area "signs and symptoms".

Section-D

Hypotheses Testing

a) Difference between pre test and post test level of knowledge score regarding dengue fever among mothers of underfive children in experimental group.

H_1: There will be significant difference between pre and post test knowledge scores regarding dengue fever among mothers of underfive children in experimental group at $p \leq 0.001$ level.

Table-4.5:

Difference between pre test and post test level of knowledge score regarding dengue fever among mothers of underfive children in experimental group.

n=30

S. No	Knowledge	Maximum score	Mean	SD	't' Value
1	Pre test	29	8.06	4.56	8.89*
2	Post test		25.8	4.25	

*** significant at $p \leq 0.001$ level , df_{29}; table value = 3.66**

The above table shows that, there is highly significant difference (**$p \leq 0.001$)** found between the pre test and post test scores of knowledge regarding dengue fever among mothers of underfive children in experimental group.

Hence it can be interpreted that the difference in the pre test and post test mean score value of knowledge regarding dengue fever is true difference and the hypothesis **(H_1)** is retained. This reveals the effectiveness of mother to mother approach on knowledge regarding dengue fever among mothers of underfive children.

b) Effectiveness of mother to mother approach on post test level of knowledge score regarding dengue fever among mothers of underfive children in experimental and control group

H_2: There will be significant difference between post test knowledge scores regarding dengue fever among mothers of underfive children in the experimental group and control group at $p \leq 0.05$level

Table-4.6:

Effectiveness of mother to mother approach on post test level of knowledge score regarding dengue fever among mothers of underfive children in experimental and control group.

n = 60

S.No	Groups	Post test		Post test 't' value
		Mean	SD	
1	Experimental group	25.8	4.25	7.367*
2	Control group	7.37	4.54	

***significant at $p \leq 0.05$ level, df_{58}; table value = 2.75**

The above table shows that, there is highly significant difference **($p \leq 0.05$)** found between the post test scores of knowledge regarding dengue fever among mothers of underfive children in experimental group and control group. Hence it can be interpreted that the difference in the post test mean score values of knowledge regarding dengue fever is true difference and the hypothesis (H_2) is retained. This reveals the effectiveness of mother to mother approach on knowledge regarding dengue fever among mothers of underfive children.

c) Association between the post test level of knowledge scores regarding dengue fever among mothers of underfive children in experimental group and control group with their selected demographic variables.

H_3: There will be a significant association between the post test level of knowledge scores regarding dengue fever among mothers of underfive children in experimental group and control group with their selected demographic variables at P ≤0.05level.

Table-4.7:

Association between the post test level of knowledge scores regarding dengue fever among mothers of underfive children in experimental group and control group with their selected demographic variables.

n=60

S. No	Demographic variables	Experimental group n = 30			Control group n =30		
		df	¡ 2	Table value	df	¡ 2	Table value
1	Age in years	2	4.08	5.99	2	2.44	5.99
2	Education	5	4.13	11.07	10	10.55	18.31
3	Occupation	2	1	5.99	8	6.42	15.51
4	Type of family	1	0.31	3.84	2	2.82	5.99
5	Religion	1	0.88	3.84	2	0	5.99
6	Monthly income	2	3.69	5.99	2	3.69	5.99
7	Number of children	2	0.84	5.99	2	1.52	5.99
8	Number of underfive children	2	0.63	5.99	2	1.66	5.99
9	Previous knowledge regarding dengue fever	1	1.5	3.84	2	1.76	5.99

*** Significant at p ≤ 0.05 level**

The above table shows that there is no significant association between the post level of knowledge of mothers in experimental group and control group with their selected demographic variables such as age, sex, educational and occupational status, type of family, religion, family income per month, number of children, number of underfive children and previous knowledge regarding dengue fever. Hence it can be interpreted that the difference in post test mean scores of experimental group and control group related to the demographic variables were not true difference and only by chance and the research hypothesis H_3 is rejected ($p \geq 0.05$ level).

Summary:

This chapter dealt with data analysis and interpretation in the form of statistical values based on the objectives. Descriptive statistics such as mean percentage and standard deviation was used to categorizing the data. Inferential statistics such as paired and un paired 't' was used to evaluate the effectiveness of mother to mother approach on level of knowledge regarding dengue fever. The chi-square test was used to associate the post test level of knowledge with their selected demographic variable**.**

CHAPTER V

DISCUSSION

This chapter discusses the findings of the study derived from the descriptive and inferential statistics. This study was conducted to assess the effectiveness of mother to mother approach on knowledge regarding dengue fever among mothers of underfive children in selected villages, Salem.

Description of the demographic variables:

- Majority of the mothers 14(46.7%) in the experimental group and in control group 17(56.7%) were in the age group of 20 to 25 years of age.
- Similar and highest percentage of mothers 9(30%) in experimental group and 9 (30%) in control group had studied up to high school
- Most of the mothers 25(83.4%) in experimental group & 20(66.67%) in control group were housewives.
- More or less similar percentage of mothers 29(96.67%) in experimental group and 30(100%) in control group were Hindu.
- Majority of mothers 26(86.7%) in experimental group and 26(86.7%) in control group had no previous knowledge regarding dengue fever
- Among the mothers who had previous knowledge regarding dengue fever (n=4), majority 3(75%) of them gained knowledge through mass media.

The present study findings is contradictory to the findings of the study done by **Jinslin Oliver, (2004)** A study to assess the effectiveness of STP on dengue fever and its prevention among mothers of preschool children in Kancheepuram. In this study, 120(100%) of mothers did not have any previous knowledge regarding dengue fever.

- Majority of mothers 18(60%) in experimental group and 27(90%) in control group belonged to nuclear family.
- Majority of mothers 22(73.33%) in experimental group and 16 (53.4%) in control group belonged to the monthly income group of less than Rs.5000 per month.

  The present study findings was supported by a study conducted by **Khan Haleem, (2009).** A study to assess the knowledge, attitude and practice regarding dengue fever among mothers of underfive children in selected rural community of Dharmapuri, Tamilnadu. In this study majority of mothers 112(26.7%) belonged to the income group of less than Rs. 5000 per month.
- Majority of mothers 15(50%) in experimental group and 11(36.7%) in control group have two children.
- Majority of mothers 21(70%) in experimental group and 21(70%) in control group have only one underfive children and 9(30%) in experimental group and 8(26.67%) in control group have two underfive children.

The first objective of the study was to assess the existing level of knowledge regarding dengue fever among mothers of underfive children in experimental and control group.

Majority of the mothers 24 (80%) in experimental group and 23(76.7%) in control group had inadequate knowledge during pre test. However during post test most of the mothers 24(80%) in experimental group and none of them in control group had adequate knowledge. Further none of the mothers in the experimental group and 21(70%) of mothers in control group had inadequate knowledge during post test.

The present study findings was supported by a study conducted by **Deepa.K, (2010)**. She assessed the effectiveness of STP on knowledge, attitude and practice regarding dengue fever among adults in selected urban community in Salem district . The result found that higher percentage of the samples 32(72%) in experimental group and 30(60%) in control group had moderately adequate knowledge during pre-test. During post test 9(18%) in experimental group and 1(3%) in control group had adequate knowledge ('t' value is 14.35). Further none of them in the experimental group and 19(63%) in the control group had inadequate knowledge during post test.

The second objective of the study is to evaluate the effectiveness of mother to mother approach on the level of knowledge regarding dengue fever among mothers of underfive children.

The investigator found that the pre and post test mean score percentage in experimental group was 8.06±4.56 and 25.8±4.25 respectively. The estimated 't' value was 8.89 which is significant at $P \leq 0.001$ level. Hence the research hypothesis H_1 is retained. This shows that mother to mother approach on the level of knowledge was effective in improving the knowledge of mothers regarding dengue fever.

The present study findings was supported by **Sylvia Juliet**, **(2008)** conducted an quasi experimental study to determine the effectiveness of mother to mother approach in disseminating information on ideal disciplinary standards among mothers of preschool children in Kabir Nagar village, Madurai. The findings of the study shows that post test mean score (90.93) was higher than the pre-test mean score (52.53) and the estimated 't' value was 49.23 at $p<0.05$ level. It proved that mother to mother approach was effective in improving the knowledge of mothers.

The present study findings was supported by **Mohammad**,**(2010)** conducted a cross-sectional study to assess the knowledge, attitudes and practices regarding

dengue fever among mothers of underfive children in Coimbatore, Tamilnadu. The findings of the study shows that more than half of the mothers (54%) had good knowledge about signs, symptoms, and modes of transmission of dengue fever. Approximately 47% of samples considered dengue fever to be a serious but preventable disease to which they are vulnerable, but a majority (77%) did not use any effective dengue fever preventive measures. Educational attainment (OR, 2.98; CI, 1.23–7.23) was positively associated with knowledge regarding dengue fever. There was no correlation between knowledge about dengue fever and preventive practices (p=0.34). Radio and TV were the predominant sources of information about dengue fever.

The third objective of the study is to associate the post test level of knowledge regarding dengue fever among mothers of underfive children in experimental group and control group with their selected demographic variables.

The present study reveals that in there is no association between the post test level of knowledge and the demographic variables in experimental group and control group.

The experimental group finding of this study is contradictory to the findings of the study by **Rajendran, (2010)** to assess the knowledge and practice regarding dengue fever among adults in selected urban communities, Chennai. The result found that there is an association found between level of knowledge and demographic variables such as education, socio economic status and previous history of dengue fever in experimental group.

The control group findings of this study supported by the **Paul Monika, (2006)** conducted a study to assess knowledge and practice regarding prevention of dengue fever among mothers of underfive children in Singasandra PHC, Bangalore

south with a view to develop an information booklet regarding dengue fever. It shows that there is no association between the level of knowledge and demographic variables of samples.

Summary:

This chapter dealt with the discussion of the study with reference to the other studies. All the objectives and hypotheses were retained except H_3 in this study.

CHAPTER VI

SUMMARY, CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

This chapter consists of summary, conclusion, and implication for nursing practice and the recommendations for further research.

Summary:

A quasi experimental study was conducted to assess the effectiveness of mother to mother approach on the level of knowledge regarding dengue fever among 60 mothers of underfive children selected by non probability convenience sampling technique. Semi structured interview schedule was used to assess the knowledge of mothers regarding dengue fever. The data collected were analyzed by using descriptive and inferential statistics. The conceptual frame work was used based on "Modified Imogene king goal attainment model".

The major findings are summarized as follows,

- In experimental group 14(46.7%) mothers and in control group 17(56.7%) mothers were belonged to 20 to 25 years of age.
- In experimental group 9(30%) mothers and in control group 9(30%) mothers had studied up to high school
- Most of the mothers 25(83.4%) in experimental group & 20(66.67%) in control group were housewives.
- In experimental group mothers 29(96.67%) and almost all mothers in control 30(100%) were Hindus.
- In experimental group 26(86.7%) mothers and 26(86.7%) mothers in control group had no previous knowledge regarding dengue fever.
- Among the mothers who had previous knowledge regarding dengue fever (n=4), majority 3(75%) of them gained knowledge through mass media.

- In experimental group 18(60%) mothers and in control group 27 (90%) were belonging to nuclear family.
- Majority of mothers 22(73.33%) in experimental group and 16 (53.4%) in control group were belonging to the income group of less than Rs.5000 per month.
- In experimental group 15(50%) mothers and in control group 11(36.7%) have two children.
- Majority of mothers 21(70%) in experimental group and 21(70%) in control group have only one underfive children.
- Majority of the mothers 24(80%) in experimental group and 23 (76.7%) in control group had inadequate knowledge during pretests. This indicated that they need information regarding dengue fever.
- The post test mean score and standard deviation were7.37± 4.54 in control group whereas 25.8± 4.25 in experimental group revealing the difference of 18.43 and 0.30 respectively.
- The pre test mean score percentage of mothers regarding dengue fever in experimental group were 27.81% (8.06± 4.5) whereas in post test mean score percentage were 88.96 % (25.8± 4.25). The estimated 't' value was 8.89 which is significant at $P \leq 0.001$ level revealing that mother to mother approach had been effective in improving knowledge regarding dengue fever among mothers of underfive children. Hence the research hypothesis H_1 was retained.
- The post test mean scores of mothers regarding dengue fever in experimental group was 25.8± 4.25 and in control group was 7.37± 4.54. The estimated 't' value was 7.367 which is significant at $p<0.05$ level. Hence the research hypothesis H_2 was retained.

- In experimental group and control group there is no association between the knowledge and the demographic variables such age, sex, educational and occupational status, type of family, religion, family income per month, number of children, number of underfive children and previous knowledge regarding dengue fever. Hence H_3 was rejected.

Conclusion:

This experimental study done to assess the effectiveness of mother to mother approach on knowledge regarding dengue fever among mothers of underfive children in selected villages, Salem. The findings of the study showed that the mother to mother approach was more effective in improving the knowledge of the mothers regarding dengue fever. There was no association between the post test knowledge score and the demographic variables in experimental group and control group. Dengue fever is increasingly recognized as one of the world's emerging infectious diseases. Over half of the world's population resides in areas potentially at risk for dengue transmission, making dengue one of the most important human viral disease in terms of morbidity and mortality. The simplest and effective way to prevent dengue fever is health education. As a health care professional we are in the position to educate mothers and thereby to adopt hygienic health practice in order to reduce the incidence of dengue fever among underfive children.

Implications:

"A stitch in time saves nine**"** is a saying and is true. It is the responsibility of health professional to educate the mothers regarding dengue fever because mothers can naturally communicates with each other in meaningful way which is free from organizational terms and professional jargons. Majority of the health problems can be prevented if people get adequate information and essential precaution. The findings of

the study have implication in different branches of nursing (i.e.,) nursing practice, nursing education, nursing administration and nursing research. The investigator received a clear idea regarding the different steps to be taken in different fields to improve the same.

There are several important implication for nursing practice.

Nursing Practice:

- Mother to mother approach is an effective and efficient way to improve the knowledge of mothers because mothers can easily understand complicated health messages if the messenger is a mother too. Community health nurse can use mother to mother approach to teach the mothers regarding dengue fever and its complications.
- Mother to mother approach educational strategy can also practiced in other settings like women self help centres and health organizations.
- Student nurses can use this intervention to create awareness on common health problems in health care settings.

Nursing Education:

- Current concepts and trends in the preventive and promotive health care practice of children with dengue fever should be insisted more in the nursing curriculum.
- Nursing personnels in community and pediatric departments should be given in service education to update their knowledge regarding dengue fever.
- The nursing students should be given experience to practice the ideas of mother to mother approach or similar once in reality by the educational institutions to develop new ideas later in their professional practice.

- As a change agent the nurse educator should prepare the nursing curriculum to assist the nursing students to educate the community through mother to mother approach.
- Seminars, workshops and conferences can be arranged regarding dengue fever and its preventive measures to make nursing professional competent enough to take care of the future generation healthier.

Nursing Administration:

- The nurse administrator can organize educational programme for community health nurses regarding prevention of dengue fever.
- The nurse administrators have to motivate the community health nurse to incorporate various simple and cost effective method to educate mothers rather than traditional method of teaching.
- Considerable amounts in the budget have to be allocated for organizing the continuing nursing education programme on dengue fever and its prevention.
- The nurse administrator should encourage the staffs and nursing students to implement the mother to mother approach on different health needs in community.

Nursing Research:

- Educational institution and service organization can motivate researchers for implementing mother to mother approach among mothers on various health topics related to child health.
- Disseminate the research findings on effect of mother to mother approach through conferences, seminar and by publishing the article in nursing journals and national and international journals.

Recommendations:

1. A comparative study can be done between rural and urban mothers of underfive children on the level of knowledge, attitude and practice regarding dengue fever
2. A similar study can be done to determine the effectiveness of mother to mother approach among mothers of underfive children for various topics.
3. A study can be done to assess the effectiveness of structured teaching programme on dengue fever among school children.
4. A descriptive study can be done to find out the incidence of dengue fever among children aged below 15years.
5. A similar study can be done to assess the effectiveness of teaching dengue fever to school children through child to child programme.

Summary:

This chapter dealt with summary, conclusion, implications for nursing practice and recommendations.

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ANNEXURE - A

LETTER SEEKING PERMISSION TO CONDUCT A RESEARCH STUDY

From

Ms.Mercy.A,

Final year M.Sc.(N),

Sri Gokulam college of Nursing,

Salem.

To

The Principal,

Sri Gokulam college of Nursing,

Salem.

Respected Madam,

Sub: Permission to conduct Research Project–request- reg.

I, **Ms. Mercy.A,** Final year M.Sc(N) student of Sri Gokulam college of Nursing is conducting research project in partial fulfillment of "The Tamilnadu Dr.M.G.R. Medical University, Chennai" as part of the requirement for the award of M.Sc(N). Degree.

Topic: "A Study to Evaluate the Effectiveness of Mother to Mother Approach on Knowledge regarding Dengue fever among Mothers of Underfive Children in Selected Villages, Salem"

I wish to seek permission to conduct the research study at Neikarapatti, and Poolavari Villages, Salem.

Kindly do the needful.

Thanking you.

Date: Yours sincerely,

Place: Salem

(Ms. Mercy.A)

ANNEXURE – B

LETTER REQUESTING TO CONDUCT A RESEARCH STUDY

SRI GOKULAM COLLEGE OF NURSING
3/836, Periyakalam, Neikkarapatti, Salem - 636 010.
Phone : 0427 - 6544550,2272240,2272250 Fax : 0427 - 2270200, 2447077
Email : sgcon2001@yahoo.com, sgcon2001@gmail.com

Date : .....

LETTER REQUESTING TO PERMISSION TO CONDUCT PILOT STUDY

TO

The Panchayat President,

Uthamasolapuram,

Salem.

Respected sir/Madam,

Sub : Permission to conduct Pilot Study - Reg

This is to introduce **Ms.Mercy .A,** Final year, M.Sc.(Nursing)student of Sri Gokulam College of Nursing. She is to conduct research project which is to be submitted to The TamilNadu Dr.M.G.R Medical University, Chennai, as partial fulfilment of University requirement for the award of M.Sc.(Nursing) Degree.

Topic: "A Study to Evaluate the Effectiveness of Mother to Mother Approach on Knowledge regarding Dengue fever among Mothers of Underfive Children in Selected Villages, Salem"

I request you to kindly permit her to conduct a Pilot study in Uthamasolapuram Community, Salem from 22.07.2013 to 27.07.2013. She will adhere to the policies and regulations of the Panchayat.

Thanking you.

Yours Sincerely

Date: 17.07.2013

Place: Salem

(Dr.K.Tamizharasi)

PRINCIPAL
Sri Gokulam College of Nursing
SALEM – 636 010.

SRI GOKULAM COLLEGE OF NURSING
3/836, Periyakalam, Neikkarapatti, Salem - 636 010.
Phone : 0427 - 6544550,2272240,2272250 Fax : 0427 - 2270200, 2447077
Email : sgcon2001@yahoo.com, sgcon2001@gmail.com

Date : .....

LETTER REQUESTING TO PERMISSION TO CONDUCT RESEARCH STUDY

TO

The Panchayat President,

Poolavari

Salem.

Respected sir/Madam,

Sub : Permission to conduct research project-Reg

This is to introduce **Ms.Mercy .A,** Final year, M.Sc.(Nursing) student of Sri Gokulam College of Nursing. She is to conduct research project which is to be submitted to The TamilNadu Dr.M.G.R. Medical University, Chennai, as partial fulfilment of University requirement for the award of M.Sc.(Nursing) Degree.

Topic: "A Study to Evaluate the Effectiveness of Mother to Mother Approach on Knowledge regarding Dengue fever among Mothers of Underfive Children in Selected Villages, Salem".

I request you to kindly permit her to conduct a research study in Poolavari community, Salem from 29.07.2013 to 27.08.2013. She will adhere to the policies and regulations of the Panchayat.

Thanking you.

Yours sincerely

Date:

Place: Salem

K.முத்துப்பொன்னு குப்புசாமி
தலைவர்
பூலாவரி அக்ரஹாரம் ஊராட்சி,
வீரபாண்டி ஒன்றியம்,
சேலம் மாவட்டம்.

(DR.K.Tamizharasi)
PRINCIPAL
Sri Gokulam College of Nursing
SALEM – 636 010.

SRI GOKULAM COLLEGE OF NURSING
3/836, Periyakalam, Neikkarapatti, Salem - 636 010.
Phone : 0427 - 6544550,2272240,2272250 Fax : 0427 - 2270200, 2447077
Email : sgcon2001@yahoo.com, sgcon2001@gmail.com

LETTER REQUESTING TO PERMISSION TO CONDUCT RESEARCH STUDY

Date : .....

TO

The Panchayat President,

Neikkarapatti,

Salem.

Respected sir/Madam,

Sub: Permission to conduct Research Project - Reg

This is to introduce **Ms.Mercy .A,** Final year, M.Sc.(Nursing)student of Sri Gokulam College of Nursing. She is to conduct research project which is to be submitted to The TamilNadu Dr.M.G.R Medical University, Chennai, as partial fulfilment of University requirement for the award of M.Sc.(Nursing) Degree.

Topic: "A Study to Evaluate the Effectiveness of Mother to Mother Approach on Knowledge regarding Dengue fever among Mothers of Underfive Children in Selected Villages, Salem"

I request you to kindly permit her to conduct a research study in Neikarapatti Community, Salem from 29.07.2013 to 27.08.2013. She will adhere to the policies and regulations of the Panchayat.

Thanking you.

Yours Sincerely,

Date: 17.07.2013

Place: Salem

20/7/13
தலைவர்
முதல்நிலை ஊராட்சி
நெய்காரப்பட்டி
சேலம்-10

(Dr.K.Tamizharasi)
PRINCIPAL
Sri Gokulam College of Nursing
SALEM – 636 010.

ANNEXURE – C

LETTER REQUESTING OPINION AND SUGESTIONS OF EXPERTS FOR CONTENT VALIDITY OF THE RESEARCH TOOL

From

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Sri Gokulam College of Nursing,
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To,

(Through proper channel)

Respected Sir/ Madam,

Sub: Requesting opinion and suggestions of experts for establishing content validity of the tool.

I **Ms. Mercy.A,** II Year M.Sc., (Nursing) student of Sri Gokulam College of Nursing, Salem, have selected the below mentioned Statement of the Problem for the research study to be submitted to The Tamil Nadu Dr. M.G.R. Medical University, Chennai as partial fulfillment for the award of Master of science in Nursing.

Topic: "A Study to Evaluate the Effectiveness of Mother to Mother Approach on Knowledge regarding Dengue fever among Mothers of Underfive Children in Selected Villages, Salem"

I request you to kindly validate the tool developed for the study and give your expert opinion and suggestion for necessary modifications.

Thanking you,

Place : Salem
Date :

Yours sincerely,

(Ms. Mercy.A)

Enclosed:

1. Certificate of validation
2. Criteria checklist of evaluation of tool
3. Tool for collection of data
4. Content of dengue fever

ANNEXURE - D

TOOL FOR DATA COLLECTION

Instructions to the interviewer:

The interviewer is required to ask following questions to respondents. Read the various options mentioned under the corresponding questions. Allow the respondent to answer, repeat the options till they understand. The investigator will tick the answer stated by the respondent for the corresponding questions.

Instructions to the participants:

This interview schedule contains questions related to dengue fever.It has two sections.

Section A: Requires information related to your personal data.

Section B: Includes question regarding dengue fever.

SECTION A: DEMOGRAPHIC DATA

1. Age of mother
    a. 18 to 25 years [ ]
    b. 26 to 35 years [ ]
    c. Above 36 years [ ]
2. Education of the mother
    a) Graduate and above [ ]
    b) Pre degree [ ]
    c) High school [ ]
    d) Middle school [ ]
    e) Elementary school [ ]
    f) No formal education [ ]

3. Occupation of the mother

    a) House wife

    b) Daily wages [ ]

    c) Private Employee. [ ]

    d) Government Employee [ ]

    e) Business [ ]

4. Type of family

    a) Nuclear family [ ]

    b) Joint family [ ]

    c) Extended family [ ]

5. Religion

    a) Hindu [ ]

    b) Muslim [ ]

    c) Christian [ ]

6. Monthly income of the family

    a) Less than Rs.5000 [ ]

    b) Rs.5000 to Rs.10000 [ ]

    c) Above Rs.10000 [ ]

7. Number of children

    a) One [ ]

    b) Two [ ]

    c) Three and Above [ ]

8. Number of under five children

    a) One [ ]

    b) Two [ ]

    c) Three and Above [ ]

9. Previous Knowledge about prevention of dengue fever

a) Yes [ ]

b) No [ ]

9.1 If yes, Source of information

a) Mass Media [ ]

b) Friends & Relatives [ ]

c) Health Professionals [ ]

SECTION – B

SEMI STRUCTURED INTERVEIW SCHEDULE ON DENGUE FEVER AMONG MOTHERS OF UNDER FIVE CHILDREN.

Instructions:

Each question has three options for respective questions in which one will be the correct answer. Kindly answer whichever you feel is correct. All information which is provided by you, will be kept confidential.

Part A: General aspects related to dengue fever:

1. Dengue fever is a

    a. Communicable disease [ ]

    b. Sexually transmitted disease [ ]

    c. Hereditary disease [ ]

2. Dengue fever is caused by

    a. E.coli bacteria [ ]

    b. Dengue virus [ ]

    c. Candida albicans [ ]

3. Dengue fever is spread by the bite of

    a. Mosquito [ ]

    b. Bed bugs [ ]

    c. Tic [ ]

Part B: Knowledge related to causes of dengue fever:

4. Dengue virus is transmitted by the bite of infected female

    a. Aedes aegypti mosquito [ ]

    b. Anopheles mosquito [ ]

    c. Culex mosquito [ ]

5. Aedes aegypti mosquito bites during

a. Day time particularly in the morning and in the evening [ ]

b. Night time particularly in the mid night [ ]

c. Day time particularly in the noon [ ]

6. The transmission cycle is

a. Mosquitoes - man [ ]

b. Man –mosquitoes - man [ ]

c. Man- mosquitoes [ ]

7. Aedes mosquitoes usually breeds in

a. Spring season [ ]

b. Summer season [ ]

c. Rainy season [ ]

8. Severe dengue infection is more common among

a. Male population [ ]

b. Children less than 15 years of age [ ]

c. Female population [ ]

9. Aedes mosquitoes breeds on water container

a. With cover [ ]

b. Without cover [ ]

c. Both with and without cover [ ]

10. Aedes mosquitoes breeds on

a. Dirty water [ ]

b. Clean water [ ]

c. Both in dirty and clean water [ ]

Part C: Knowledge related to clinical manifestations:

11. Symptoms of dengue fever are

a. Itching and sleeplessness [ ]

b. High fever, head ache, vomiting, joint pain and skin rashes [ ]

c. Weight loss and constipation [ ]

12. Skin rashes that occurs in the first or second day of illness appears as

a. Flushed skin [ ]

b. Large dark red spots [ ]

c. Small red spots [ ]

13. Late manifestations of dengue fever are

a. Bleeding from mouth and nose [ ]

b. Fever with vomiting [ ]

c. Head ache and body pain [ ]

Part D: Knowledge related to preventive measures:

14. Personal protective measures to prevent mosquito bite are

a. Usage of mosquito repellent creams, liquids, coils and mats [ ]

b. Removal of the curtains and screens from windows and doors [ ]

c. Wearing short sleeve shirts and pants [ ]

15. Cheapest method to avoid bite of mosquitoes are

a. Usage of mosquito repellent creams, liquids, coils and mats [ ]

b. Use bed nets [ ]

c. Use insecticides [ ]

16. Children can be protected from mosquito bite by

a. Limiting the amount of time spent by the children outside during dawn and dusk [ ]

b. Dress up the children with short sleeve shirt and pants [ ]

c. Apply body lotion [ ]

17. Most effective means of controlling dengue fever at source by

a. Using mosquito repellents [ ]

b. Draining stagnant water around the house [ ]

c. Using bed nets and installation of mosquito meshes [ ]

18. The most common preventive practice of dengue fever is

a. Maintaining adequate ventilation inside the home [ ]

b. Take bath and wear clean cloths daily [ ]

c. Detection and elimination of mosquito breeding sources [ ]

19. Large water storing containers should be cleansed using

a. Bleach with help of a nylon brush [ ]

b. Soap with help of a coconut scrubber [ ]

c. Baking soda [ ]

20. Chemical control measures for controlling mosquitoes are

a. Spraying with appropriate insecticides on open collection of water and thermal fogging. [ ]

b. Add small amount of salt to the water stored in the outdoor container [ ]

c. Adding chlorine to water [ ]

21. Cheap and easily available chemical larvicide that destroy larvas of mosquitoes is

a. Baking soda [ ]

b. Bleach [ ]

c. Turmeric [ ]

22. Outdoor thermal fogging reduces the biting of mosquitoes for

a. 3 days [ ]

b. 5 days [ ]

c. 10 days [ ]

Part D: Knowledge related to care of child with dengue fever:

23. Home care of child with dengue fever includes

a. Provide adequate bed rest, light nourishing food with prescribed medication. [ ]

b. Spread neem leaves on his bed [ ]

c. Don't touch the child and isolate him [ ]

24. Measures to control fever are

a. Put wet cloth on his fore head and sponge the skin with cool water [ ]

b. Bath the child thrice a day [ ]

c. Taking the child to temple for pooja [ ]

25. Dehydration among children with vomiting and diarrhoea can be prevented by

a. Limiting the water intake [ ]

b. Restricting of food and fluid intake completely [ ]

c. Providing plenty of fluids like water and juices [ ]

26. Preventive measures that should be carried out while the child has fever are

a. Isolate the child [ ]

b. Providing nutritious food and fluids to his siblings [ ]

c. Place the child under mosquito net and use mosquito repellent to avoid mosquito bite [ ]

27. When temperature declines, warning signs may develop within

a. 10 to 15 days [ ]

b. 15 to 30 days [ ]

c. 3 to 7 days [ ]

28. The warning signs that appears after the fever subsides are

a. Severe abdomen pain, vomiting, bleeding from nose and gums [ ]

b. Weight loss and excessive urination [ ]

c. Fever and diarrhoea [ ]

29. Complications of dengue infection are.

a. Bleeding, liver and kidney failure [ ]

b. Hearing loss [ ]

c. Skin diseases and cancer [ ]

SCORING PROCEDURE

Interpretations:

Each correct response carries 1 mark.

Each wrong response carries 0 mark.

LEVEL OF KNOWLEDGE	MARKS	PERCENTAGE
Inadequate	0 – 9	0 – 31%
Moderately adequate	10– 19	32 – 65%
Adequate	20 – 29	66 – 100%

KEY:

QUESTION NO.	ANSWER	QUESTION NO.	ANSWER
1	A	15	b
2	C	16	a
3	A	17	b
4	A	18	c
5	A	19	a
6	B	20	a
7	C	21	b
8	B	22	a
9	B	23	a
10	B	24	a
11	B	25	c
12	A	26	c
13	A	27	c
14	A	28	a

ஐந்து வயதிற்குட்பட்ட குழந்தைகளின் தாய்மார்களுக்கு இடையே டெங்கு காய்ச்சல் தொடர்பான அறிவுத்திறனை சோதிக்கும் பகுதிவரையறுக்கப்பட்ட நேர்காணல் பட்டியல்

நேர்காணல் செய்பவர்களுக்கான வழிமுறைகள்:

நேர்காணல் செய்பவர் தாய்மார்களிடம் கீழ்வரும் கேள்விகளை கேட்க வேண்டும். கேள்விகளில் கீழ்வரும் அனைத்து பதிகளையும் வாசித்தல் வேண்டும். தாய்மார்கள் பதில் கூற அனுமதித்து அவர்களுக்கு நன்கு புரியும்வரை பதில்களை எடுத்துரைக்க வேண்டும்.நேர்காணலில் பங்குபெற்ற தாய்மார்கள் கூறும்பதிலை ஆராய்ச்சியாளர் (✓) குறியிட வேண்டும்.

நேர்காணலில் ஈடுபடுவோருக்கான வழிமுறைகள்:

இந்தநேர்காணல் பட்டியலில் டெங்கு தொடர்பான 2 பாகங்கள் உள்ளன. அவை,

பாகம்-அ: தனிநபர் பட்டியல் விவரம்

பாகம்-ஆ: டெங்கு தொடர்பாக கேள்விகள்

பாகம் - அ

தனிநபர் பற்றிய விவரங்கள்

அன்பார்ந்த பங்கேற்பாளர்களே,

இப்பகுதியில் கொடுக்கப்பட்டுள்ள கேள்விகள் உங்களின் தனிப்பட்ட விவரங்களை அறிந்து கொள்ள பயன்படுத்தப்படுகிறது. நீங்கள் அளிக்கும் விவரங்கள் பத்திரமாக பாதுகாப்படும்.

1. தாயின் வயது
   a) 20 வயது முதல் 25 வயது வரை [ ]
   b) 26 வயது முதல் 35 வயது வரை [ ]
   c) 36 வயதுக்கு மேல் [ ]
2. கல்வித் தகுதி
   a) பட்டப்படிப்பு [ ]
   b) உயர்நிலைக்கல்வி [ ]
   c) மேல்நிலைக்கல்வி [ ]
   d) இடைநிலைக்கல்வி [ ]
   e) ஆரம்பக்கல்வி [ ]
   f) படிப்பறிவின்மை [ ]

3. தாயின் தொழில்

a) குடும்பத்தலைவி [ ]

b) தினக்கூலி [ ]

c) தனியார் நிறுவனத்தில் வேலை செய்பவர் [ ]

d) அரசுத்துறையில் வேலை செய்பவர் [ ]

e) வியாபாரி [ ]

4. குடும்ப வகை

a) தனிக்குடும்பம் [ ]

b) கூட்டுக்குடும்பம் [ ]

c) விரிவான குடும்பம் [ ]

5. மதம்

a) இந்து [ ]

b) கிறிஸ்தவம் [ ]

c) இஸ்லாம் [ ]

6. குடும்ப மாத வருமானம்

a) ரூபாய் 5,000க்கும் குறைவு [ ]

b) ரூபாய் 5,000 முதல் 10,000 வரை [ ]

c) ரூபாய் 10,000க்கு மேல் [ ]

7. குழந்தைகளின் எண்ணிக்கை

a) ஒன்று [ ]

b) இரண்டு [ ]

c) மூன்று மற்றும் அதற்கு மேல் [ ]

8. ஐந்து வயதுக்கு உட்பட்ட குழந்தைகளின் எண்ணிக்கை

a) ஒன்று [ ]

b) இரண்டு [ ]

c) மூன்று மற்றும் அதற்கு மேல் [ ]

9. டெங்கு காய்ச்சலை பற்றி உங்களுக்கு தெரிந்த தகவல்

a) ஆம் [ ]

b) இல்லை [ ]

9.1 ஆம் எனில், அதைப்பற்றிய தகவலுக்குரிய ஆதாரம்

a) தகவல் தொடர்பு சாதனங்கள் [ ]

b) நண்பர்கள் மற்றும் உறவினர்கள் [ ]

c) சுகாதார அலுவலர்கள் [ ]

பாகம் – ஆ

டெங்கு தொடர்பான கேள்விகள்

குறிப்பு: கீழே கொடுக்கப்பட்ட ஒவ்வொரு கேள்விகளுக்கும் மூன்று பதில்கள் கொடுக்கப்பட்டுள்ளன. அவற்றில் ஒரு பதில் மிகச் சரியானதாகும். அனைத்து கேள்விகளையும் நன்குகேட்டு சரியான பதிலை அளிக்குமாறு கேட்டுக் கொள்ளப்படுகிறது.நீங்கள் அளிக்கும் தகவல் அனைத்தும் பத்திரமாக பாதுகாக்கப்படும்.

பிரிவு அ: டெங்கு காய்ச்சலை பற்றிய அறிவு சார்ந்த கேள்விகள்:

1. டெங்கு காய்ச்சல் ஒரு

a) தொற்று நோய் [ ]

b) பால்வினை நோய் [ ]

c) மரபு தொடர் நோய் [ ]

2. டெங்கு காய்ச்சல் இதனால் ஏற்படுகிறது

a) இ.கோலை பாக்டீரியா [ ]

b) கேன்டிடா அல்புகேன்ஸ் [ ]

c) டெங்கு வைரஸ் [ ]

3. டெங்கு காய்ச்சல் இது கடிப்பதால் பரவுகிறது

a) கொசுக்கள் [ ]

b) மூட்டை பூச்சிகள் [ ]

c) உண்ணி [ ]

பிரிவு ஆ: காரணிகளை பற்றிய அறிவு சார்ந்த கேள்விகள்

4. டெங்கு வைரஸ் பரவுதலுக்கு காரணமான கொசுக்களின் பெயர்

a) இடீஸ் ஏகிப்டை கொசுக்கள் [ ]

b) அனோபிளஸ் கொசுக்கள் [ ]

c) கூலக்ஸ் கொசுக்கள் [ ]

5. இடீஸ் கொசுக்கள் கடிக்கும் நேரம்

a) பகலில் குறிப்பாக காலை மற்றும் சாயங்கால நேரங்களில் [ ]

b) இரவில் குறிப்பாக நடு இரவு நேரத்தில் [ ]

c) பகலில் குறிப்பாக மதிய வேலையில் [ ]

6. பரவல் சூழற்சி

a) கொசுக்கள் - மனிதன் - கொசுக்கள் [ ]

b) மனிதன் - கொசுக்கள் - மனிதன் [ ]

c) கொசுக்கள் - கொசுக்கள் -மனிதன் [ ]

7. இடீஸ் கொசுக்களின் இன விருத்திக்கேற்ற பருவ காலம்

a) வசந்த காலம் [ ]

b) கோடை காலம் [ ]

c) மழை காலம் [ ]

8. டெங்கு காச்சலினால் கடுமையாக பாதிக்கப்படுபவர்கள்

a) ஆண்கள் [ ]

b) 15 வயதிற்குட்பட்ட குழந்தைகள் [ ]

c) பெண்கள் [ ]

9. இடீஸ் கொசுக்கள் இனப்பெருக்கம் அடைகின்ற நீர்பார்த்திரங்கள்

a) மூடப்பட்டிருக்கிறவைகள் [ ]

b) திறந்து வைக்கப்பட்டிருக்கிறவைகள் [ ]

c) மூடப்பட்டு மற்றும் திறந்திருக்கிறவைகள் [ ]

10. இடீஸ் கொசுக்கள் விருத்தியடைவதற்கு ஏற்றது

a) அசுத்தமான நீர் [ ]

b) சுத்தமான நீர் [ ]

c) சுத்தமான மற்றும் அசுத்தமான நீர் [ ]

பிரிவு இ: அறிகுறிகள் பற்றிய அறிவு சார்ந்த கேள்விகள்

11. டெங்கு காய்ச்சலின் ஆரம்ப அறிகுறிகள்

a) அரிப்பு மற்றும் தூக்கமின்மை [ ]

b) கடுமையான காய்ச்சல், தலைவலி, வாந்தி, மூட்டுவலி மற்றும் தோல் வெடிப்புகள் [ ]

c) உடல் எடை குறைதல் மற்றும் மலச்சிக்கல் [ ]

12. டெங்கு காய்ச்சலின் முதலாம் மற்றும் இரண்டாம் நாட்களில் ஏற்படும் தோல் வெடிப்பு காணப்படும் விதம்.

a) சிவந்த தோல் [ ]

b) தோலில் பெரிய அளவிலான கடுஞ்சிவப்பான பகுதிகள் [ ]

c) தோலில் சிறிய அளவிலான சிவப்பான பகுதிகள் [ ]

13. டெங்கு காய்ச்சலின் பிந்தின அறிகுறிகள்

a) வாயிலும் மூக்கிலும் இருந்து இரத்தக்கசிவு [ ]

b) காய்சல் மற்றும் வந்தி [ ]

c) தலைவலி மற்றும் உடல் வலி [ ]

பிரிவு ஈ: தடுப்புமுறைகளை பற்றிய அறிவு சார்ந்த கேள்விகள்

14. கொசுக்கடியை தவிர்க்கும் தனிப்பட்ட பாதுகாப்பு முறைகள்

a) கொசு விரட்டும் கிரீம்கள், திரவங்கள், சுருள்கள் மற்றும் கொசு அழிப்பான் உபயோகித்தல் [ ]

b) ஜன்னல் மற்றும் கதவுகளில் இருந்து திரைச்சீலைகளை அகற்றுதல் [ ]

c) குழந்தைகளுக்கு சிறிய கைகளை உடைய சட்டைகள் மற்றும் கால் சட்டைகளை அணிவித்தல். [ ]

15. கொசுக்கடியை தவிர்க்கும் விலை மலிவான முறைகள்

a) கொசு விரட்டும் கிரீம்கள், திரவங்களை உபயோகித்தல் [ ]

b) கொசு வலைகளை உபயோகித்தல் [ ]

c) பூச்சிக்கொல்லி மருந்துகளை உபயோகித்தல். [ ]

16. கொசுக்கடியில் இருந்து குழந்தைகளை பாதுகாக்கும் முறை

a) காலை மற்றும் சாயங்கால நேரங்களில் குழந்தைகள் வீட்டுக்கு வெளியே செலவிடும் நேரத்தை குறைத்தல். [ ]

b) குழந்தைகளுக்கு சிறிய கைகளை உடைய சட்டைகள் மற்றும் கால்சட்டைகளை அணிவித்தல். [ ]

c) நிறம்வர்த்திக்கும் திரவங்களை உபயோகித்தல். [ ]

17. டெங்கு காய்ச்சலை தோற்றுவிக்கும் மூலத்தை கட்டுப்படுத்துவதில் மிக சிறந்த முறை

a) கொசு விரட்டிகளை உபயோகித்தல். [ ]

b) வீட்டுக்குள்ளும் மற்றும் வீட்டைற் சுற்றியும் தேங்கி நிற்கும் நீரை வெளியேற்றுதல். [ ]

d) கொசுவலைகளை உபயோகித்தல் மற்றும் கொசு நுழைய முடியாத பின்னல் வலைகளை பொருத்துதல் [ ]

18. டெங்கு காய்ச்சலின் பொதுவான தடுப்பு முறைகள்

a) வீட்டுக்குள் போதுமான காற்றோட்டத்தை ஏற்படுத்துதல். [ ]

b) அன்றாடம் குளித்து சுத்தமான உடைகளை உடுத்துதல். [ ]

d) கொசு உற்பத்தியாகும் இடங்களை கண்டறிந்து நீக்குதல். [ ]

19. பெரிய நீர் சேகரிப்பு தொட்டிகளை சுத்தப்படுத்த உபயோகிக்கப்படுபவைகள்

a) பிளீச்சிங் பொடி மற்றும் நைலான் பிரஸ் [ ]

b) சோப்பு மற்றும் தேங்காய் நார் [ ]

c) பேக்கிங் சோடா [ ]

20. கொசுக்களை கட்டுப்படுத்த பயன்படுத்தப்படும் ரசாயன முறைகள்

a) திறந்தவெளி நீர்த்தேக்கங்களின் மீது பூச்சிக்கொல்லி மருந்துகளை தெளிப்பது மற்றும் வேப்ப இலை புகைமூட்டம் இடுதல். [ ]

b) வீட்டின் வெளியே வைக்கப்பட்டுள்ள நீர்ப்பாத்திரங்களில் உப்பு சேர்த்தல் [ ]

c) நீரில் குளோரின் சேர்த்தல் [ ]

21. கொசுக்களின் முட்டைப்புழுக்களை அழிக்க பயன்படுத்தப்படும் விலை மலிவான மற்றும் சுலபமாக கிடைக்கும் ரசாயன முட்டைப்புழுக்கொல்லி

a) பேக்கிங் சோடா [ ]

b) பிளீச்சிங் பவுடர் [ ]

c) மஞ்சள் [ ]

22. வீட்டிற்கு வெளியே வெப்ப புகைமூட்டம் இடுவதன் மூலம் எத்தனை நாட்கள் வரை கொசுக்கடியை தவிர்க்கலாம்.

a) 3 நாட்கள் [ ]

b) 5 நாட்கள் [ ]

c) 10 நாட்கள் [ ]

பிரிவு: உ) டெங்கு காய்ச்சலுடைய குழந்தையின் வீட்டுப்பராமரிப்பு சார்ந்த கேள்விகள்

23. டெங்கு காய்ச்சலுடைய குழந்தைகளின் வீட்டு பராமரிப்பு முறைகள்

a) மருந்துகளுடன் எளிதில் ஜீரணமாகும் ஊடட்டச்சத்துமிக்க உணவு உண்ணக்கொடுத்தல் மற்றும் போதுமான அளவிற்கு ஓய்வு அளித்தல். [ ]

b) குழந்தையின் படுக்கையில் வேப்ப இலைகளை இடுதல். [ ]

c) குழந்தையை தொடாது தனிமைப்படுத்துதல். [ ]

24. காய்ச்சலை கட்டுப்படுத்தும் முறைகள்

a) நெற்றியில் ஈரத்துணியை இட வேண்டும் மற்றும் குளிர்ந்த நீரால் உடலை துடைக்க வேண்டும். [ ]

b) ஒரு நாளைக்கு 3 முறை குழந்தையை குளிக்க வைக்க வேண்டும் [ ]

c) குழந்தையை கோவில் பூஜைக்காக கூட்டிச்செல்ல வேண்டும். [ ]

25. வாந்தி மற்றும் வயிற்றுபோக்கால் ஏற்படும் குழந்தையின் உடல் நீர் குறைவை தடுக்கும் முறைகள்

a) தண்ணீர் பருகுதலை கட்டுப்படுத்துதல். [ ]

b) உணவு மற்றும் நீர் ஆகாரங்கள் உட்கொள்ளுவதை முற்றிலுமாக கட்டுப்படுத்துதல் [ ]

c) அதிக அளவு தண்ணீர் மற்றும் பழச்சாறுகளை பருக கொடுத்தல்.[ ]

26. காய்ச்சல் உள்ள குழந்தைகளை கொண்ட வீடுகளில் மேற்கொள்ள வேண்டிய தடுப்பு முறைகள்

a) குழந்தையை தனிமைப்படுத்துதல். [ ]

b) குழந்தையின் உடன்பிறப்புகளுக்கு சத்தாண உணவு மற்றும் நீர்ஆகாரங்களை கொடுத்தல். [ ]

c) குழந்தைகளை கொசு கடிப்பதை தவிர்க்க கொசு வலைகள் மற்றும் கொசு விரட்டிகளை பயன்படுத்துதல். [ ]

27. டெங்கு காய்ச்சல் தோன்றிய பின்பு எத்தனை நாட்களுக்குள் எச்சரிக்கையின் அறிகுறி தோன்றும்.

a) 10 முதல் 15 நாட்கள் [ ]

b) 15 முதல் 30 நாட்கள் [ ]

c) 3 முதல் 7 நாட்கள். [ ]

28. காய்ச்சல் குறைந்த பின் தோன்றும் எச்சரிக்கையின் அறிகுறிகள்

a) கடுமையான அடிவயிற்றுவலி, வாந்தி, ஈறுகள் மற்றும் மூக்கிலிருந்து இரத்தக்கசிவு [ ]

b) உடல் எடை குறைதல் மற்றும் அதிகப்படியான சிறுநீர் கழித்தல் [ ]

c) காய்ச்சல் மற்றும் வயிற்றுப்போக்கு [ ]

29. டெங்கு காய்ச்சலின் பின் விளைவுகள்

a) இரத்தக்கசிவு, ஈரல் மற்றும் சிறுநீரகம் செயலிழப்பு [ ]

b) காது கேளாமை [ ]

c) தோல் வியாதிகள் மற்றும் புற்றுநோய் [ ]

LESSON PLAN ON DENGUE FEVER

ANNEXURE - E

LESSON PLAN ON DENGUE FEVER

NAME OF THE STUDENT TEACHER	: MERCY.A
TOPIC	: DENGUE FEVER
GROUP	: MOTHERS OF UNDERFIVE CHILDREN
DURATION	: 40 MINUTES
METHOD OF TEACHING	: LECTURE CUM DISCUSSION
MEDIUM OF TEACHING	: TAMIL
A.V AIDS	: FLASH CARD
PLACE	: COMMUNITY AREA.

CENTRAL OBJECTIVES:

At the end of the class the mothers will gain adequate knowledge regarding dengue fever and adapt that knowledge in preventing dengue fever and providing care to their children.

SPECIFIC OBJECTIVES

At the end of the class the mothers of underfive children are able to,

- define dengue fever
- enumerate the incidence of dengue fever.
- identify the causes of dengue fever.
- enlist the clinical manifestations of dengue fever.
- narrate the diagnostic procedures of dengue fever.
- list down the preventive measures of dengue fever.
- explain the care of child with dengue fever.
- List out the complication of dengue fever.

Time	Specific objectives	Content	Teacher's activity	Learner activity	AV - Aids	Evaluation
3 mts	Introduce the topic.	**INTRODUCTION:** Dengue is increasingly recognised as one of the world's major infectious diseases. The world health organization [WHO] estimates that 50 to 100 million infections occur yearly, including 500,000 dengue haemorrhagic fever [DHF] and 22,000 deaths, mostly among children. Dengue haemorrhagic fever is one of the leading cause for hospitalization and death among children in India.	Introduction of the topic.	Ready to learn.	Flash card	What is the leading cause of hospitalization among children in India?
2 mts	Define "dengue fever".	**DEFINITION:** Dengue is an acute viral infection with potential fatal complications. It is caused by dengue virus that is spread by the bite of infected Aedes mosquitoes. It causes a wide spectrum of illness from mild asymptomatic illness to severe fatal dengue haemorrhagic fever and dengue shock syndrome.	Defining the term dengue fever.	Ask doubts and clarifies	Flash card	Dengue virus is spread through the bite of ?

2 mts	Enumerate the incidence of dengue fever.	**INCIDENCE:** The incidence of dengue has been growing dramatically around the world in recent decades. Approximately 2.5 billion people or 40% of population live in dengue risk regions with 100 million new cases each year worldwide. It infects 50 to 390 million people worldwide a year, leading to half a million hospitalizations and approximately 25,000 deaths. In India the disease reflects in cyclic patterns, with over the years have increased in frequency and geographical extent. According to the state records nearly 5,376 cases of dengue was reported in Tamilnadu, the highest in the country in the year of 2012. Tamilnadu has also recorded the highest number of deaths [60] in the year 2012.**(Kounteya,2012)**	Narrating the incidence of dengue fever.	Listening.	Flash card	How many dengue fever cases are reported in Tamil nadu in the year of 2012
3 mts	Identify the causes of dengue fever.	**CAUSES:** **VIROLOGY:** Dengue fever is caused by Dengue virus. **TRANSMISSION:** Dengue virus is primarily transmitted by Aedes aegypti mosquitoes. The transmission cycle is man –mosquito- man.	Enumerating causes of dengue fever .	Listening and asking doubts.	Flash card	What is the dengue transmission cycle?

		The Aedes mosquito typically bites during the day, particularly in the early morning and evening. An infection can be acquired via a single bite of female mosquito. **PREDISPOSITION:** Severe disease is more common among children less than 15 years of age, and in contrast to many other infections. **ENVIRONMENTAL FACTORS:** The population of Aedes aegypti fluctuates with rainfall and water storage. Its life span is influenced by temperature and humidity, survives best between 16º c-30ºc and a relative humidity of 60 to 80 %. Rainy season is suitable for the breeding of mosquitoes. It breeds in the containers in and around the houses. Stagnant water, rooting vegetation, standing water in things like discarded tires, domestic water storage containers, old flower pots, coconut shells are the breeding source of Aedes mosquito.				

5 mts	Enlist the clinical manifestations of dengue fever.	**CLINICAL MANIFESTATION:** Typically children infected with dengue virus are asymptomatic (80%) or only have mild symptoms such as an uncomplicated fever. Others have more severe illness (5%) and in small proportion it is life threatening. The characteristic symptoms of dengue are: • Sudden onset of high fever • Headache • Sore throat and cough • Running nose • Muscle and joint pain • Vomiting • Generalized body pain • Flushed skin • Skin rashes (red spots do not disappear when skin is pressed) usually last for 2 to 7 days. • Mild bleeding from nose and mouth.	Listing out the clinical manifestations of dengue fever.	Listening and asking doubts.	Flash card	What are the characteristic symptoms of dengue fever?

3 mts	Narrate diagnostic evaluative procedures of dengue fever.	**DIAGNOSTIC EVALUATION:** **Laboratory investigation:** • Blood test • Urine test • Abdomen scan	Listing out the diagnostic measures of dengue fever.	Listening	Flash card	Mention the lab test to diagnose dengue fever?
10mts	List down the preventive measures of dengue fever.	**PREVENTION:** **Personal protective measures:** • Use of mosquito repellent creams, liquids, coils, mats etc. • Wearing clothing that fully covers the skin like full sleeve shirts and pants • Use of bed nets while sleeping especially for infants and young children during day time to prevent mosquito bite. • Air conditioning also help to keep mosquito at bay. • Install mosquito meshes on the window • Limit the amount of time kids spend outside during the day, especially in the hours around the dawn and dusk when the mosquitoes are most active.	List out preventive measures of dengue fever.	Listening	Flash card	What are the Personal protective measures to prevent mosquito bite?

		Biological Control: • Use of biocides.(neem leaves fogging) **Environmental management and source reduction methods:** • Detection and elimination of mosquito breeding sources, Get rid of standing water in the things like containers and discarded tires and be sure to change the water in birdbaths, dog bowls and flower vases at least once a week. • Draining stagnant rain water in roof tops, porticos, and sun shades. • Make sure your house and the surrounding area is free of stagnant water, rooting vegetation especially in the monsoon season. • Reduce the use of water storage containers because it is the important source of breeding. • Buckets and small containers should be inverted, if stored outside. • Proper covering, emptying and cleaning of domestic water storage containers on a weekly basis. • The internal and external walls of domestic water storage containers are cleansed using bleach with the help of a nylon				

		brush for 15 to 20 minutes until eggs, pupa and larvae of mosquitoes are removed from it and covered with a tight lid or screen • Covered containers should be routinely inspected because even the best designed lids and screens can tear in harsh climate and with age. • Cover all buckets, jericans, drums and over roof tanks which are used to store water. Ensure that faulty guttering which retain water is fixed. • Avoid stagnation of rain water in drinking water containers, discarded food containers, coconut shells, water containers in the toilet, bathrooms and broken house hold utensils. • Reduction of open collections of water through environment modification is the preferred method of control. • Disposal of solid waste properly and removing artificial man made habitats like broken household utensils. • Proper disposal of used water **Chemical control:** • The primary method of controlling A.aegypti by eliminating				

		its habitats, this is done by adding insecticides or biological control agents to these areas. • Spraying with organophosphate insecticides is effective in case of open collection of water. • Application of appropriate insecticides to water storage outside containers. • Use of chemical larvicides like bleach and malathione in breeding containers is very effective. • Peridomestic thermal fogging reduce the resting and biting for the 3days after treatment. Where as indoor fogging suppress adult mosquito for 5 days. • Plant based repellent against mosquito borne disease is effective. **CARE OF CHILDREN WITH DENGUE FEVER:** **When to approach physician :** If your child has high fever and has at least two of the following symptoms contact physician immediately. • Severe head ache • Skin rash				
6 mts	Explain the care of children with dengue fever.		Briefing the care of children with dengue fever .	Listening and clarifying doubts	Flash card	What are the signs of dehydration?

		• Severe eye pain (behind the eyes) • Joint pain, muscle pain and bone pain • Mild bleeding manifestations eg., nose or gum bleeding • Small red spots on skin Contact physician immediately. Physician may ask for a blood test to confirm the diagnosis. **Home Care of the child with dengue fever:** • Provide adequate bed rest • Control of fever ➢ Put wet cloth on child's forehead so often, to bring the fever down. ➢ Sponge child's skin with cool water if fever stays high. ➢ Provide plenty of water to drink. • Prevention of dehydration ➢ Provide plenty of liquids (water, juices and tender coconut water). Dehydration occurs when the child loses too much of fluid (from high fever, vomiting or poor oral intake). Give plenty of water and fluids and watch for signs of dehydration. Bring the child to clinic if any of the following signs develop:				

		✓ Decrease in urination (check number of wet diaper or trips to the bathroom). ✓ Few or no tears when the child cries. ✓ Dry mouth, tongue or lips. ✓ Sunken eyes. ✓ Listlessness or overly agitated or confused. ✓ Fast heart beat. ✓ Cold and clammy fingers and toes. ✓ Sunken fontanels in infant. • Administer prescribed medications as directed by the physician. • Don't skip doses of medication, this make them less effective. • Be aware of the common side effects that may be caused by medications. • Give him light and nourishing food. • Protective measures against spread of infection among family members ➢ Place the patient under bed net or use insect repellent on the patient while they have fever. Avoid mosquito				

		bite while child has fever because mosquitoes that bite the infected child can go on to bite and infect others. ➢ Kill all mosquitoes in the house and empty containers that carry water. ➢ Put screens on windows and doors to prevent mosquitoes from coming in to home. • Care of child while fever subsides ➢ Watch for warning signs as the temperature declines 3 to 7 days after symptoms began. Return immediately to clinic if any of the following warning signs appear : ✓ Severe abdominal pain ✓ Persistent vomiting ✓ Red patch or spots on the skin ✓ Bleeding from nose and gums ✓ Vomiting blood ✓ Black tarry stools ✓ Drowsiness or irritability ✓ Pale cold or clammy skin ✓ Difficulty breathing Dengue may last up to 10 days, but some children may continue feeling tired for up to a month or more.				

3 mts 3 mts	List out the complication.	**COMPLICATION:** The severe complication of dengue infection is liver failure, kidney failure, infection of brain tissues, blood vomiting, bleeding disorder, destruction of blood cells and infection of heart covering layers. **CONCLUSION**: Dengue is now a global threat and the most important arthropod-borne viral disease of public health significance. As there is no specific antiviral treatment for dengue, one method of controlling and preventing transmission of dengue virus is to combat the vector mosquitoes by increasing the awareness of environmental management practices among public in addition to early detection of signs and symptoms of dengue fever and hospitalization	List down the complications of dengue fever .	Ask questions and clarify doubts.	Flash card	What are complications of dengue fever?

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டெங்கு காய்ச்சல் பற்றிய நலக்கல்வி

மாணாக்க ஆசிரியர் பெயர்	:	மெர்சி.அ
தலைப்பு	:	டெங்கு காய்ச்சல்
குழு	:	ஐந்து வயதுக்குட்பட்ட குழந்தைகளின் தாய்மார்கள்
நேரம்	:	40 நிமிடங்கள்
கற்பிக்கும்முறை	:	போதித்தலும் கலந்துரையாடலும்
ஒலி, ஒளி உபகரணங்கள்	:	வண்ணப்பட அட்டை
கற்பிக்கும் மொழி	:	தமிழ்
இடம்	:	கிராம பகுதி

மையகுறிக்கோள்கள்

வகுப்பின் முடிவில், தாய்மார்கள் டெங்கு காய்ச்சலை பற்றி போதுமான அறிவை அடைந்திடுவதோடு, டெங்கு காய்ச்சலை தடுப்பதிலும், தங்களின் குழந்தைகளை பேணி பாதுகாப்பதிலும் அந்த அறிவை பயன்படுத்துவார்கள்.

திட்டமிடப்பட்ட குறிக்கோள்கள்

வகுப்பின் முடிவில், ஐந்து வயதுக்கு உட்பட்ட குழந்தைகளின் தாய்மார்களால் முடியும்

- டெங்கு காய்ச்சலை விவரிக்க
- டெங்கு காய்ச்சலின் நிகழ்வை குறிப்பிட
- டெங்கு காய்ச்சலுக்கான காரணங்களை கண்டு பிடித்திட
- டெங்கு காய்ச்சலின் அறிகுறிகளை கண்டறிய
- டெங்கு காய்ச்சலின் தடுப்பு முறைகளை பட்டியலிட
- டெங்கு காய்ச்சலின் பரிசோதனை முறைகளை விவரிக்க
- டெங்கு காய்ச்சலின் பின் விளைவுகளை குறிப்பிட

நேரம்	தனிப்பட்ட குறிக்கோள்	பொருளடக்கம்	கற்பிப்பவர் செயல்பாடுகள்	கற்பவர் செயல்பாடுகள்	ஒலி ஒளி உபகரணங்கள்	கேள்விகள்
3 நிமிடங்கள்	தலைப்பை அறிமுகப்ப டுத்துதல்	**முன்னுரை:** உலகின்மிகப்பெரிய தொற்று நோய்களில் ஒன்றாக டெங்கு அடையாளம் காணப்பட்டிருக்கிறது. 5,00,000 டெங்கு இரத்தப்போக்கு காய்ச்சலும் குறிப்பாக குழந்தைகளின் மத்தியில் 22,000 இறப்புகளை உள்ளடக்கி 5 முதல் 10 கோடி தொற்றுகள் வருடந்தோறும் நிகழ்வதாக உலக சுகாதார நிறுவனம்கணக்கிட்டிருக்கிறது. இந்தியாவில் அதிக எண்ணிக்கைகளில் குழந்தைகளை மருத்துவ சிகிச்சைக்கு உட்படுத்தப்படுவதற்கும், அவர்களின் இறப்புக்கு முதன்மையான காரணங்களில் ஒன்றாக டெங்கு இரத்தப்போக்கு காய்ச்சல் கருதப்படுகிறது.	தலைப்பின் அறிமுகம்	கற்பவர் ஆயத்தம்	'வண்ணப்பட அட்டை	இந்தியாவில் அதிக எண்ணிக்கை யான குழந்தைகளை மருத்துவ சிகிச்சைக்கு உட்படுத்தும் காரணமாக அமையும் நோயின் பெயர் என்ன?
2 நிமிடங்கள்	டெங்கு காய்ச்சலை விவரி	<u>வரையறை</u> டெங்கு என்பது இறப்பதற்கு உரிய பின் விளைவுகளை உருவாக்கும் நுண்ணுயிர் கிருமியால் ஏற்படும் தொற்று நோய் ஆகும். இது டெங்கு வைரஸ் என்ற கிருமியினால் பாதிக்கப்பட்ட இடிஸ் கொசுக்கள்	டெங்கு காய்ச்சலை விவரித்தல்	சந்தேகங்களை கேட்டு தெளிவு பெறுதல்	வண்ணப்பட அட்டை	டெங்கு கிருமி எது கடிப்பதால் பரவுகிறது?

2 நிமிடங்கள்	டெங்கு காய்ச்சலின் நிகழ்வை குறிப்பிடு	கடிப்பதினால் பரவக்கூடிய தொற்று நோய். இது அறிகுறியற்ற தொடர் சுகவீனத்திலிருந்து இறப்புக்குரிய கடுமையான டெங்கு இரத்தப்போக்கு காய்ச்சலை உண்டாக்குகிறது. **நிகழ்வு** அண்மைக்காலங்களில் டெங்கு காய்ச்சல் பிரமிப்பூட்டும் விதத்தில் உலகம் முழுவதும் பரவிக்கொண்டு இருக்கிறது. ஒவ்வொரு வருடமும் டெங்கு சுமார் 1 கோடி புதிய தோற்ஊகள் ஏற்படுவதுடன் 2.5 பில்லியன் மக்கள் டெங்கு காய்ச்சலினால் பாதிக்கப்பட்ட பிரதேசங்களில் வாழ்கிறார்கள். உலகளாவிய விதத்தில் ஆண்டுதோறும் இது 50 மில்லியன் முதல் 390 மில்லியன் மக்களை பாதித்து மேலும் அரைமில்லியன் குழந்தைகளை மருத்துவ சிகிச்சைக்கு,உட்படுத்துகிறது, சுமார் 25,000 இறப்புக்களையும் ஏற்படுத்துகிறது(உலக சுகாதார நிறுவனம்).மாநில பதவின்படி, 2012 ஆம் ஆண்டில் ஏறக்குறைய 5376 டெங்கு தொற்றுகள் தமிழ் நாட்டில் பதிவு செய்யப்பட்டிருக்கின்றன. மேலும் இந்த ஆண்டில்,அதிகபட்ச எண்ணிக்கையில்	டெங்கு காய்ச்சலை நிகழ்வை எடுத்துரைத்தல்	சந்தேகங்களை கேட்டு தெளிவு பெறுதல்	வண்ணப்பட அட்டை	2012-ம் ஆண்டில் தமிழ்நாட்டில் எத்தனை குழந்தைகள் டெங்கு காய்ச்சலினால் பாதிக்கப்பட்டிருப்பதாக கணக்கிடப் படட்டிருக்கி றது?

3 நிமிடங்கள்	டெங்கு காய்ச்சலின் காரணங்களை கண்டு பிடித்திடு	இறப்புகளும் (60) தமிழ்நாட்டில் தான் பதிவு செய்யப்பட்டிருக்கிறது.(கௌடேயா,2012) **காரணிகள்** டெங்கு காய்ச்சல்,டெங்கு வைரஸினால் ஏற்படுகிறது. *பரவுதல்* டெங்கு வைரஸ் பிரதானமாக பெண் இடிஸ் ஏகிப்டை கொசுக்களினால் பரவுகிறது. பரவுதலின் சுழற்சி மனிதன் - கொசு - மனிதன் இடிஸ் கொசுக்கள் பகல் நேரத்தில் குறிப்பாக காலையிலும் மாலையிலும் கடிக்கிறது. டெங்கு காய்ச்சலின் பாதிப்புக்கு உள்ளாகுபவர்கள் டெங்கு காய்ச்சல் எல்லா வயதினரையும் பாதிக்கும்.குறிப்பாக15 வயதிற்குடட்பட்ட குழந்தைகளின் மத்தியில் இந்த நோய் பரவலாக காணப்படுகிறது. சுற்றுச்சூழல் காரணிகள் இடிஸ் கொசுக்களின் எண்ணிக்கை	டெங்கு காய்ச்சலின் காரணங்களை எடுத்து கூறுதல்.	கவனித்தல்	வண்ணப்பட அட்டை	டெங்கு காய்ச்சலின் பரவுதலின் சுழற்சியை குறிப்பிடுக?

		மழைப்பொழிவு மற்றும் தண்ணீர் தேங்கியிருப்பதின் தன்மைக்கேற்ப மாறுபடுகிறது. இடிஸ் கொசுக்கள் வாழ்வதற்கேற்ற வெப்பம் 16˚சி 30˚சி மற்றும் ஈரப்பதம் 60-80% ஆகும்.மேலும் இதன் இனப்பெருக்கத்திற்கு மழை காலம் ஏற்றதாயிருக்கிறது. வீட்டிற்குள் இருக்கிற மூடப்படாத பாத்திரங்கள் மற்றும் தொட்டிகளில் இருக்கும் தண்ணீர்,தாவர வளர்ப்புகள், பழைய மலர் பானைகள், கால் மிதிகள் போன்றவை இடிஸ் கொசுக்களின் இன பெருக்கத்திற்கேற்ற இடங்களாய் இருக்கின்றன.வீட்டிற்கு வெளியே இருக்கிற மூடப்படாத தொட்டிகள் மற்றும் உடைந்த வீட்டு உபயோக பாத்திரங்களில் இருக்கும் தண்ணீர், தேங்காய் ஓடுகள்,டயர்கள்,மரப்பொந்துகள், சிறுமழைநீர் தேக்கங்கள் மற்றும் வீட்டுத்தாழ்வாரங்கள் போன்றவை இடிஸ் கொசுக்களின் இனவிருத்திக்கேற்ற ஆதாரங்களாய் இருக்கின்றன.				

1 நிமிடம்	டெங்கு காய்ச்சலின் அறிகுறிகளை கண்டறிக	**அறிகுறிகள்** பொதுவாக டெங்கு வைரசினால் பாதிக்கப்பட்ட குழந்தைகளில் பலர் நோயின் அறிகுறிகள் இன்றி காணப்படுகின்றனர்.மேலும்80%குழந்தைகள் சாதாரண காய்ச்சலை கொண்டிருப்பார்கள், மற்றவர்கள் கடுமையான சுகவீனம் உடையவர்களாகவும்(5%).சிறு தொகுதியினருக்கு,இது உயிருக்கு அச்சுறுத்தலாக இருக்கும். டெங்கு காய்ச்சலின்அறிகுறிகள் • கடுமையான காய்ச்சல் • தலைவலி • தொண்டைப்புண் மற்றும் இருமல் • தசை மற்றும் மூட்டு வலி • வாந்தி • உடல்வலி • சிவந்த தோல் • தோல் வெடிப்புகள் (தோலை அழுத்தும்போது செம்புள்ளிகள் மறையாது)	டெங்கு காய்ச்சலின் அறிகுறிகளை பட்டியலிடுதல்	கவனித்தல்	வண்ணப்பட அட்டை	டெங்கு காய்ச்சலின் அறிகுறிகள் யாவை?

1 நிமிடம் 12 நிமிடங்கள்	டெங்கு காய்ச்சலின் பரிசோதனை முறைகளை விவரிக்க டெங்கு காய்ச்சலின் தடுப்பு முறைகளை பட்டியலிடுக	இவை அனைத்தும் வழக்கமாக 2 முதல் 7 நாட்கள் நீடித்திருக்கும். • மூக்கிலும் வாயிலுமிருந்து இரத்தம் கசிதல். **<u>பரிசோதனை முறைகள்</u>** • இரத்த பரிசோதனை • சிறுநீர் பரிசோதனை • ஸ்கேனிங் செய்தல் **<u>தடுப்பு முறைகள்</u>** **<u>தனிப்பட்ட பாதுகாப்பு முறைகள்:</u>** • கொசுவிரட்டும் திரவங்கள்,சுருள்கள், மின்சார கொசு அழிப்பான்கள் போன்றவை உபயோகித்தல். • முழுக்கை சட்டைகள் மற்றும் முழுக்கால் சட்டைகள் போன்ற உடல் முழுவதையும் மறைக்கக் கூடிய உடைகளை குழந்தைகளுக்கு அணிவித்தல் வேண்டும். • குறிப்பாக பச்சிளம் குழந்தைகள்	டெங்கு காய்ச்சலின் பரிசோதனைமுறைகளை பட்டியலிடுதல் டெங்கு காய்ச்சலின் தடுப்புமுறைகளை விவரித்தல்.	கவனித்தல் கவனித்தல்	வண்ணப்பட அட்டை வண்ணப்பட அட்டை	டெங்கு காய்ச்சலை கண்டறிய பயன்படுத்தப் படும் பரிசோத னைகளை குறிப்பிடுக? கொசுக்கடியை தடுப்பதற்காக நாம் பயன் படுத்தும் தனிப்பட்ட பாதுகாப்பு முறைகள் யாவை?

		மற்றும் சிறு குழந்தைகள் உறங்கும் போது கொசு வலைகளை உபயோகிக்க வேண்டும். • கொசுக்கள் அதிகமாக காணப்படும் பகல் பொழுதில்,குறிப்பாக(காலை 8 மணி முதல் மாலை 3மணிவரை) குழந்தைகள் வீட்டின் வெளியே செலவிடும் நேரத்தை குறைத்திட வேண்டும். <u>சுற்றுப்புற மாற்றமைப்பு முறைகள்</u> • கொசுக்கள் இனவிருத்தி செய்யும் இடங்களை கண்டறிந்து அவற்றை நீக்குதல். • வீட்டு உபயோக நீர்த்தொட்டிகள் மற்றும் டயர்கள் போன்றவைகளில் தேங்கியிருக்கும் தண்ணீரை வெளியேற்றுதல். • மலர் குவளைகளிலிருக்கும் தண்ணீரை வாரத்திற்கு ஒரு முறையாவது மாற்றுதல் • மொட்டை மாடிகள்,வீட்டின் தாழ்வாரங்களில் தேங்கியிருக்கும்				

		மழை நீரை வெளியற்றுதல் குறிப்பாக மழை காலங்களில் வீடு மற்றும் வீட்டைச்சுற்றிலும் தேங்கி நிற்கும் தண்ணீர் இல்லாதவாறு நிச்சயப்படுத்திக் கொள்ளுங்கள். • தண்ணீர் சேகரிக்கும் பாத்திரங் களின் உபயோகத்தை குறைத்துக் கொள்ளுங்கள்.ஏனெனில்அவைகளே கொசு இன பெருக்கத்திற்கு முக்கிய ஆதாரங்களாக இருக்கின்றன. • வாளிகள் மற்றும் சிறு பாத்திரங்களை வீட்டிற்கு வெளியேசேகரித்து வைத்திருந்தால் அவைகளை கவிழ்த்து வையுங்கள். • வீட்டு உபயோகத்திற்காக தண்ணீர் சேகரித்திருக்கும் பாத்திரங்களை சரியாக மூடிவையுங்கள். • வாரத்திற்கொரு முறையாவது நீரை வெளியேற்றி சுத்தப்படுத்துங்கள். வீட்டு உபயோக தண்ணீர் தொட்டியின் உட்புற மற்றும் வெளிப்புற சுவர்களை நைலான்				

		பிரசை உபயோகித்து, கொசுக்களின் முட்டைகள்,முட்டைப்புழுக்கள் மற்றும் முட்டைப்புழுக்கூடு நீக்கப்படும்வரை 15 முதல் 20 நிமிடங்கள் பிளீச்சிங் பொடியை கொண்டு சுத்தப்படுத்தி இறுக்கமான மூடி அல்லது துணியினால் மூடிட வேண்டும். • மூடப்பட்டிருக்கும் தண்ணீர் பாத்திரங்களின் மூடிகளை பரிசோதனை செய்தல் வேண்டும். ஏனெனில், மிக நன்றாக வடிவமைக்கப்பட்ட மூடிகளும் கூட காலப் போக்கில் சிதைந்திடக்கூடும். • தண்ணீர் சேகரிக்க உபயோகிக்கும் வாளிகள்,பாத்திரங்கள் மற்றும் மொட்டை மாடி தொட்டிகள் எல்லாவற்றையும் மூடுங்கள். • தண்ணீர் தேங்கக்கூடிய சாக்கடையை சீர் செய்யுங்கள். • குடிநீர் தொட்டிகள், பயன்படுத் தப்பட்ட பாத்திரங்கள், தேங்காய்				

		ஓடுகள், கழிவறை மற்றும் குளியலறைகளில் உபயோக படுத்த படும் வாளிகள் மற்றும் உடைந்த வீட்டு உபயோக வாத்திரங்களில் மழைநீர் தேங்குவதை தவிர்த்திடுங்கள். • திறந்தவெளி சிறு மழைநீர் தேக்கங்களை குறைத்திட சுற்றுப்புற மாற்றமைப்பு முறைகளை கை கொள்ள வேண்டும். • திடக்கழிவை சரியான முறையின் நீக்குவதோடு மனிதர்களால் உண்டாக்கப்படும் கொசு இனவிருத்தி செய்யும் இடங்களை நீக்க வேண்டும். • உபயோகித்த நீரை சரியான முறையில் வெளியேற்ற வேண்டும். <u>இரசாயன கட்டுப்பாட்டு முறைகள்</u> • இடிஸ் ஏகிப்டை கட்டுப்படுத்தும் பிரதான முறைகளாய் கருதப்படுவது கொசுக்களின் வசிப்பிடங்களில், பூச்சிக்கொல்லி மருந்துகள் சேர்ப்பது				

		ஆகும். • திறந்தவெளி தண்ணீர் தேக்கங் களில் ஆர்கனோபாஷபேட் பூச்சிக் கொல்லியை தெளிப்பது பலனளிக்கும். • கொசுகள் இனவிருத்தியடையும் பாத்திரங்களில் பிளீச்சிங் பொடி போன்ற முட்டைப்புழுக்கொல்லி மருந்துகளை உபயோகிப்பது மிகுந்த பலனளிக்கும். • தாவரம் சார்ந்த கொசுவிரட்டி மருந்துகள் (வேப்பமர விதை மற்றும் இலை புகைமூட்டம்) அதிக பயன்தருகின்றன. • வீட்டிற்கு வெளியே வெப்ப புகை மூட்டுவதால் கொசுக்கள் கடிப்பதை 3 நாள் வரை குறைக்கலாம். மேலும் வீட்டிற்குள் புகை மூட்டமிடுவதால் 5 நாள் வரை கொசு கடிப்பதை தவிர்க்கலாம்.				

6 நிமிடங்கள்	டெங்கு காய்ச்சலுடைய குழந்தைகளின் பராமரிப்பை விவரி	**டெங்கு காய்ச்சலுடைய குழந்தைகளின் பராமரிப்பு:** <u>எப்போது மருத்துவரை அணுக வேண்டும்?</u> உங்கள் குழந்தைக்கு கடுமையான காய்ச்சல் மற்றும் கீழே குறிப்பிட்டிருக்கிறவைகளில் ஏதேனும் இரண்டுநோய்அறிகுறிகள்இருக்குமேயானால் உடனடியாக மருத்துவரை அணுகவும். • கடுமையான தலைவலி • கண்களின் பின்புறத்தில் வலி • வயிற்று போக்கு • மூட்டுவலி, தசைவலி மற்றும் எலும்பு வலி • மூக்கு மற்றும் ஈறுகளில் இரத்தக்கசிவு • சிவந்த தோல் சருமம் • தோலில் சிறப்பு புள்ளிகள் மேலும் இரத்தப்பரிசோதனை செய்தபின் மருத்துவர் நோயை உறுதிப்படுத்துவார் <u>டெங்கு காய்ச்சலுடைய குழந்தையின் வீட்டுப்பராமரிப்பு</u>	டெங்கு காய்ச்சலுடைய குழந்தைகளின் பராமரிப்பை குறிப்பிடுதல்.	சந்தேகங்களை கேட்டு தெளிவடைதல்	வண்ணப்பட அட்டை	உடல்நீர் குறைவின் அறிகுறிகளை குறிப்பிடுக?

		• போதுமான அளவிற்கு ஓய்வு அளிக்கவும். • *காய்ச்சலைக் கட்டுப்படுத்துதல்* ➢ காய்ச்சலை குறைப்பதற்கு குழந்தையின் நெற்றியில் ஈரத்துணியை மீண்டும் மீண்டும் இட வேண்டும். ➢ காய்ச்சல் அதிகமாக நீடித்திருக்குமானால் குளிர்ந்த நீரால் உடலை துடைக்க வேண்டும். • *உடல் நீர்க்குறைவை தவிர்த்தல்* ➢ அதிகப்படியாக நீர்ச்சத்தை குழந்தைகள் இழக்கும்போது உடல் நீர்க்குறைவு ஏற்படுகிறது. (அதிக காய்ச்சல்,வாந்தி அல்லது குறைவாக நீர்பருகுதலினால்).அதனால் குழந்தைகளுக்கு அதிக அளவு நீராகாரங்கள் பருக கொடுக்க வேண்டும்(தண்ணீர், பழச்சாறுகள் மற்றும் இளநீர்).				

		➢ உடல் நீர் குறைவின் அறிகுறிகளை கவனிக்கவும். கீழே குறிப்பிட்டிருக்கிற அறிகுறிகளில் ஏதேனும் குழந்தைக்கு காணப்படும்மானால் உடடியாக குழந்தைகளை மருத்துவமனைக்கு கொண்டு செல்லவும். o குறைந்த அளவுசிறுநீர் வெளியேற்றம் மற்றும் குழந்தை அழும்போது சிறிதளவு அல்லது கண்ணீர் இல்லாமல் இருத்தல் o உலர்ந்த வாய், நாக்கு மற்றும் உதடுகள் o குழிந்த கண்கள் o மந்தத்தன்மை o அதிக இதயத்துடிப்பு o குளிர்ந்த மற்றும்ஈரமான விரல்கள் மற்றும் பாதங்கள் • மருத்துவர் பரிந்துரைத்த				

		மருந்துகளை குழந்தைக்கு கொடுக்க வேண்டும். • அவ்வாறு கொடுக்க தவறினால் மருந்துகள் குறைந்த பலனளிக்கும். • பொதுவான பக்கவிளைவுகளை பற்றி அறிந்திருக்க வேண்டும். • குழந்தைகளுக்கு எளிதில் ஜீரணமாகும் ஊட்டச்சத்து மிகுந்த உணவை கொடுக்க வேண்டும். <u>நோயுற்ற குழந்தையின் குடும்பத்தினர்க்கு நோய் பரவுதலை தடுக்கும் முறைகள்</u> • காய்ச்சல் உடைய குழந்தையை கொசு வலையின் கீழ் படுக்க வைக்கவும்.அல்லது கொசு விரட்டிகளை உபயோகிக்கவும். • காய்ச்சல் உடைய குழந்தையை கொசு கடிப்பதை தவிர்க்க வேண்டும்;ஏனெனில் பாதிக்கப்பட்ட குழந்தையை கடித்த கொசு மற்றவர்களை கடித்தால் அவர்களும் நோய்வாய்பட கூடும். • வீட்டிலிருக்கும் அனைத்து				

		கொசுக்கள் விருத்தியடையும் இடங்களை நீக்கி வீட்டிற்குள் கொசு வருவதை தடுக்க ஜன்னல்களிலும் கதவுகளிலும் பின்னல் வலைகளை பொருத்துங்கள். <u>மருத்துவ சிகிச்சைக்குப்பின் குழந்தைகளின் பராமரிப்பு</u> பொதுவாக 3 முதல் 7 நாட்கள் வரை நீடிக்கும் டெங்கு காய்ச்சலின் மருத்துவ சிகிச்சைக்கு பின் காய்ச்சல் குறையும் போது எச்சரிக்கையின் அறிகுறிகள் தோன்றக்கூடும். கீழ்க்கண்ட எச்சரிக்கையின் அடையாளங்களில் ஏதேனும் ஒன்று தோன்றுமானால் உடனடியாக மருத்துவரை அணுகுங்கள். • கடுமையான அடிவயிற்றுவலி • தொடர்ச்சியான வாந்தி • தோலின் மீது சிவந்த பகுதி • முக்கு மற்றும் ஈறுகளில் இரத்தக்கசிவு • இரத்த வாந்தி எடுத்தல் • கறுப்பாக மலம் கழித்தல்				

3 நிமிடங்கள் 3 நிமிடங்கள்	டெங்கு காய்ச்சலின் பின்விளைவுகளபட்டியலிடு	• வெளிறிய குளிர்ந்த சருமம் டெங்கு காய்ச்சல், பத்து நாட்களுக்குள் குணமடைந்து விடும்.ஆனால் சில குழந்தைகள் ஒரு மாதம் மற்றும் அதற்கு மேலும் கூடசோர்வை உணர்வார்கள். **பின் விளைவுகள்:** ஈரல் செயலிழத்தல், சிறுநீரகம் செயலிழத்தல் மூளையின் திசுக்களில் நோய் தொற்று, இரத்த வாந்தி, இரத்த அணுக்களின் சிதைவு, உடல் உறுப்புகளிலிருந்து இரத்தக் கசிதல் மற்றும் இருதய மூடுதிரைகளில் பாதிப்பு போன்றவை டெங்கு காய்ச்சலின் கடுமை யான பின்விளைவுகள். **முடிவுரை:** தற்போது டெங்கு காய்ச்சல் உலக சுகாதாரத்தை அச்சுறுத்துகிற மனித இனத்தில் தோன்றிய கொசுக்களினால் பரவக்கூடிய தொற்றுநோயாகும். டெங்கு காய்ச்சலை குணப்படுத்த குறிப்பிடும்படியான மருத்துவ சிகிச்சைகள் இல்லாததால், டெங்கு வைரஸ் பரவுவதை தடுப்பதற்கும்,	டெங்கு காய்ச்சலின் பின்விளைவுகளை பட்டியலிடுதல்	சந்தேகங்களை கேட்டு தெளிவு பெறுதல்	வண்ணப்பட அட்டை	டெங்கு காய்ச்சலின் பின்விளைவுகள் யாவை?

		கட்டுப்படுத்துவதற்கும் இருக்கிற ஒரே வழி என்னவென்றால் டெங்கு காய்ச்சலின் அடையாளங்கள் மற்றும் அறிகுறிகளை ஆரம்பத்திலேயே கண்டறிந்து குழந்தைகளை மருத்துவ சிகிச்சைக்குட்படுத்த வேண்டும். மேலும் பொதுமக்களின் மத்தியில் சுற்றுச் சூழல் மேலாண்மை முறைகளை குறித்த விழிப்புணர்வை அதிகரித்து, நோய் பரப்பும் கொசுக்களை எதிர்த்து போராட வேண்டும்.				

ANNEXURE – F

LIST OF EXPERTS

1. **Dr. R. Ramalingam,M.D.,DCH,F.A.A.P.(USA)**
   Pediatric Consultant,
   Sri Gokulam Hospital,
   Salem.
2. **Dr. G.Prakash,M.D.,**
   Consultant, Community Medicine,
   Sri Gokulam Hospital,
   Salem.
3. **Prof. Dr. K.Maheswari, Ph.D(N).,**
   Vice Principal,
   Vinayaka Mission Annapoorna College of Nursing
   Salem.
4. **Mrs.C.Kavitha, M.Sc(N).,**
   HOD of Child Health Nursing Dept.,
   Shanmuga College Of Nursing,
   Salem.
5. **Mrs.K.Kavitha, M.Sc(N).,**
   Assistant Professor,
   Shri B M Patil College Of Nursing,
   Bijapur.
6. **Mrs.Malathi, M.Sc(N).,**
   Associate Professor,
   Department of Community Health Nursing,
   Vinayaka Mission Annapoorna College of Nursing,
   Salem.
7. **Mrs.A.Latha, M.Sc(N).,**
   Associate Professor,
   Department of Child Health Nursing,
   Vivekananda College of Nursing,
   Tiruchengode.

ANNEXURE –G

CERTIFICATE OF VALIDATION

This is to certify that the tool developed by **Ms. Mercy.A**, Final year M.Sc. Nursing student of Sri Gokulam College of Nursing, Salem (affiliated to The Tamil Nadu Dr. M.G.R. Medical University) is validated and can proceed with this tool and content for the main study entitled **"A Study to Evaluate the Effectiveness of Mother to Mother Approach on Knowledge regarding Dengue fever among Mothers of Under five Children in Selected Villages, Salem".**

Signature with Date

CERTIFICATE OF VALIDATION

This is to certify that the tool developed by **Ms. Mercy.A**, Final year M.Sc. Nursing student of Sri Gokulam College of Nursing, Salem (affiliated to The Tamil Nadu Dr. M.G.R. Medical University) is validated and can proceed with this tool and content for the main study entitled **"A Study to Evaluate the Effectiveness of Mother to Mother Approach on Knowledge regarding Dengue fever among Mothers of Under five Children in Selected Villages, Salem".**

Signature with Date

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05/07/13

Signature with Date

Dr.G.PRAKASH, B.Sc., M.B.B.S., DPH., M.PHA.,
MD(HA)., PGDCC(UK).,
Consultant-Community Medicine,
Sri Gokulam Hospital,
SALEM-4.

CERTIFICATE OF VALIDATION

This is to certify that the tool developed by **Ms. Mercy.A**, Final year M.Sc. Nursing student of Sri Gokulam College of Nursing, Salem (affiliated to The Tamil Nadu Dr. M.G.R. Medical University) is validated and can proceed with this tool and content for the main study entitled **"A Study to Evaluate the Effectiveness of Mother to Mother Approach on Knowledge regarding Dengue fever among Mothers of Under five Children in Selected Villages, Salem".**

Signature with Date

CERTIFICATE OF VALIDATION

This is to certify that the tool developed by **Ms. Mercy.A**, Final year M.Sc. Nursing student of Sri Gokulam College of Nursing, Salem (affiliated to The Tamil Nadu Dr. M.G.R. Medical University) is validated and can proceed with this tool and content for the main study entitled **"A Study to Evaluate the Effectiveness of Mother to Mother Approach on Knowledge regarding Dengue fever among Mothers of Under five Children in Selected Villages, Salem".**

Kavitha C 5/7/13.

Signature with Date

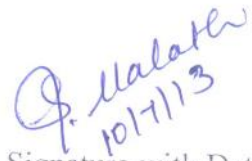
CERTIFICATE OF VALIDATION

This is to certify that the tool developed by **Ms. Mercy.A**, Final year M.Sc. Nursing student of Sri Gokulam College of Nursing, Salem (affiliated to The Tamil Nadu Dr. M.G.R. Medical University) is validated and can proceed with this tool and content for the main study entitled **"A Study to Evaluate the Effectiveness of Mother to Mother Approach on Knowledge regarding Dengue fever among Mothers of Under five Children in Selected Villages, Salem".**

Signature with Date 20/7/13

CERTIFICATE OF VALIDATION

This is to certify that the tool developed by **Ms. Mercy.A**, Final year M.Sc. Nursing student of Sri Gokulam College of Nursing, Salem (affiliated to The Tamil Nadu Dr. M.G.R. Medical University) is validated and can proceed with this tool and content for the main study entitled **"A Study to Evaluate the Effectiveness of Mother to Mother Approach on Knowledge regarding Dengue fever among Mothers of Under five Children in Selected Villages, Salem".**



Signature with Date

CERTIFICATE OF VALIDATION

This is to certify that the tool developed by **Ms. Mercy.A**, Final year M.Sc. Nursing student of Sri Gokulam College of Nursing, Salem (affiliated to The Tamil Nadu Dr. M.G.R. Medical University) is validated and can proceed with this tool and content for the main study entitled **"A Study to Evaluate the Effectiveness of Mother to Mother Approach on Knowledge regarding Dengue fever among Mothers of Under five Children in Selected Villages, Salem".**

Signature :
Name : A. Latha.
Designation : Asso. Professor
Seal :

ANNEXURE - H

CERTIFICATE OF EDITING

TO WHOMSOEVER IT MAY CONCERN

Certified that the dissertation paper titled **"A Study to Evaluate the Effectiveness of Mother to Mother Approach on Knowledge regarding Dengue fever among Mothers of Under five Children in Selected Villages, Salem."** by **Ms.Mercy.A,** has been checked for accuracy and correctness of English language usage in the tool is lucid, unambiguous, free of grammatical / spelling errors and apt for the purpose.

Signature:

Date:

Department of English
Anbu Arts and Science Colleg
Komarapalayam.

CERTIFICATE OF EDITING

TO WHOMSOEVER IT MAY CONCERN

Certified that the dissertation paper titled **"A Study to Evaluate the Effectiveness of Mother to Mother Approach on Knowledge regarding Dengue fever among Mothers of Under five Children in Selected Villages, Salem."** by **Ms.Mercy.A,** has been checked for accuracy and correctness of Tamil language usage in the tool is lucid, unambiguous, free of grammatical / spelling errors and apt for the purpose.

Signature:

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ANNEXURE – I

FORMULAS USED IN THE STUDY

Reliability of the tool

Reliability of the tool was measured by test retest method among 5 mothers of underfive children. This is estimated by administration of tool to 5 mothers of underfive children at two different occasion. Scores are compares and calculated by using the equation,

$$r = \frac{\frac{\Sigma xy - \Sigma x \Sigma y}{n}}{\sqrt{\left[\frac{\Sigma x^2 - (\Sigma x)^2}{n}\right]\left[\frac{\Sigma y^2 - (\Sigma y)^2}{n}\right]}}$$

Formula for mean

Formula for mean is

$$\bar{x} = \frac{\Sigma fx}{N}$$

Here

$\bar{x}$ = mean

x = variable

f = frequency

N = Σf = Total frequency

Formula for Standard deviation

Formula for standard deviation is

$$\pm = \sqrt{\frac{\Sigma x^2}{N} - \left(\frac{\Sigma x}{N}\right)^2}$$

σ = standard deviation

Here N, = Total number of observation

Formula for paired 't' test:

Test statistics (t) = $\frac{\overline{d}}{\frac{S}{\sqrt{n}}} \sim tn-1$

Here,

$$\overline{d} = \frac{\Sigma d}{n}$$

d = x-y, is the difference between the two sample observation.

n = sample size

$$s = \sqrt{\frac{1}{n-1}\Sigma(d-\overline{d})^2}$$

Formula for Unpaired 't' test

$$t = \frac{\overline{x_1} - \overline{x_2}}{S\sqrt{\frac{1}{n_1} + \frac{1}{n}}}$$

$$S = \sqrt{\frac{\Sigma\left(x_1 - \overline{x_1}\right)^2 + \Sigma\left(x_2 - \overline{x}_2\right)^2}{n_1 + n_2 - 2}}$$

Test for association of attributes

Test statistics $(¡^2) = \sum \frac{(O-E)^2}{E} \sim \chi^2_{(m-1)\,(n-1)}$

Here,

'm' denotes the number of rows, n denotes the number of columns of m ×n contingency table

'O' denotes observed frequency

'E' denotes the expected frequency

ANNEXURE – J

FLASH CARDS

டெங்கு காய்ச்சல்

அட்டை - 1: முன்னுரை

உலகின் மிகப்பெரிய தொற்று நோய்களில் ஒன்றாக டெங்கு அடையாளம் காணப்படுகிறது. வருடந்தோறும் 5,00,000 டெங்கு இரத்தப்போக்கு காய்ச்சல் (DHF) குறிப்பாக குழந்தைகளின் மத்தியில் 22,000 இறப்புகள் நிகழ்வதாக உலக சுகாதார நிறுவனம் கணக்கிட்டு இருக்கிறது.

அட்டை-2: வரையறை

டெங்கு காய்ச்சல் எனபடுவது இடிஸ் கொசுக்கள் மூலம் பரவக்கூடிய ஒரு தொற்றுநோய் ஆகும். இது டெங்கு வைரஸ் எனப்படும் நுண்ணுயிர் கிருமிகளால் பரவுகிறது.

அட்டை-3: காரணிகள்:

டெங்கு காய்ச்சல் டெங்கு வைரஸினால் ஏற்படுகிறது.

பரவுதல்:

டெங்கு வைரஸ் பிரதானமாக பெண் இடிஸ் ஏகிப்டை கொசுக்களினால் பரவுகிறது. இக்கொசுக்கள் பாதிக்கப்பட்ட மனிதனிடம் இருந்து அடுத்த மனிதனை கடிப்பதன் மூலமாக இந்த நோயை பரப்புகிறது. மேலும் இடிஸ் கொசுக்கள், பகல் நேரத்தில் குறிப்பாக காலையிலும், மாலையிலும் கடிக்கிறது.

பரவுதல் - சுழற்சி:

மனிதன் - கொசு - மனிதன்

அட்டை-4: டெங்கு காய்ச்சலின் பாதிப்புக்கு உள்ளாகுபவர்கள்:

டெங்கு காய்ச்சல் எல்லா வயதினரையும் பாதிக்கும். குறிப்பாக 15 வயதிற்குட்பட்ட குழந்தைகளின் மத்தியில் இந்த நோய் பரவலாக காணப்படுகிறது.

அட்டை-5: சுற்றுச்சூழல் காரணிகள்:

இடிஸ் கொசுக்கள் வாழ்வதற்கேற்ற வெப்பநிலை $16^{o}C$ - $30^{o}C$ மற்றும் ஈரப்பதம் 60% முதல் 80% ஆகும். மேலும் இடிஸ் கொசுக்களின் இனப்பெருக்கத்திற்கு மழைக்காலம் ஏற்றதாய் இருக்கிறது. வீட்டிற்குள் இருக்கிற மூடப்படாத பாத்திரங்கள் மற்றும் தொட்டிகளில் இருக்கும் தண்ணீர், தாவர வளர்ப்புகள், பழைய மலர் பானைகள், கால் மிதிகள் போன்றவை இடிஸ் கொசுக்களின் இனப்பெருக்கத்திற்கேற்ற இடங்களாய் இருக்கின்றன.

அட்டை-6: சுற்றுச்சூழல் காரணிகள்:

வீட்டிற்கு வெளியே இருக்கிற மூடப்படாத தொட்டிகள் மற்றும் உடைந்த வீட்டு உபயோக பாத்திரங்களில் இருக்கும் தண்ணீர், தேங்காய் ஓடுகள், டயர்கள், மரப்பொந்துகள், சிறுமழைநீர் தேக்கங்கள் மற்றும் வீட்டுத் தாழ்வாரங்கள் போன்றவை இடிஸ் கொசுக்களின் இன விருத்திற்கேற்ற ஆதாரங்களாய் இருக்கின்றன.

அட்டை-7: டெங்கு காய்ச்சலின் அறிகுறிகள்

கொசு கடித்த 3 முதல் 10 நாட்களுக்குள் அறிகுறிகள் தென்படும்.

- கடுமையான காய்ச்சல்
- தலைவலி
- தொண்டைப்புண் மற்றும் இருமல்
- தசை மற்றும் மூட்டுவலி
- வாந்தி
- உடல் வலி
- சிவந்ததோல் சருமம்
- தோலில் சிவந்த புள்ளிகள் காணப்படுதல்
- மூக்கிலும், வாயிலும் இருந்து இலேசாக இரத்தம் கசிதல்

அட்டை-8: பரிசோதனை முறைகள்

- இரத்த பரிசோதனை
- சிறுநீர் பரிசோதனை
- ஸ்கேனிங் செய்தல்

அட்டை-9: தடுப்பு முறைகள்:

தனிப்பட்ட பாதுகாப்பு முறைகள்

- மாலைப்பொழுதில் வீடுகளில் கதவு மற்றும் ஜன்னல்களை அடைக்கவேண்டும்.
- கொசு விரட்டும் திரவங்கள், சுருள்கள், மின்சார கொசு அழிப்பான்கள் போன்றவைகளை உபயோகித்தல்
- குறிப்பாக பச்சிளங்குழந்தைகள் மற்றும் சிறுகுழந்தைகள் உறங்கும்போது, கொசுவலைகளை உபயோகித்தல் வேண்டும்.
- முழுக்கை சட்டைகள் மற்றும் முழுக்கால் சட்டைகள் போன்ற உடல் முழுவதையும் மறைக்கக்கூடிய உடைகளை குழந்தைகளுக்கு அணிவித்தல் வேண்டும்.

அட்டை-10: சுற்றுப்புற மாற்றமைப்பு முறைகள்

- கொசு இனவிருத்தி செய்யும் இடங்களை கண்டறிந்து அவற்றை நீக்குதல்
- வீட்டு உபயோக நீர்த்தொட்டிகள் மற்றும் டயர்களில் தேங்கி இருக்கும் தண்ணீரை வெளியேற்றுதல்
- மலர் குவளைகளிலிருக்கும் தண்ணீரை வாரத்திற்கு ஒருமுறை மாற்றுதல்
- மழைக்காலங்களில் வீட்டைச் சுற்றி உள்ள பகுதிகளில் தேங்கி நிற்கும் தண்ணீரை வெளியேற்றுதல்
- வாளிகள், அரவைக் கற்கள் மற்றும் சிறு பாத்திரங்களை வெளியே வைத்திருந்தால் அவைகளை கவிழ்த்து வைக்கவேண்டும்.

அட்டை-11: சுற்றுப்புற மாற்றமைப்பு முறைகள்

- வீட்டு உபயோகத்திற்காக தண்ணீர் சேகரித்து வைத்து இருக்கும் பாத்திரங்களை சரியாக மூடி வைக்கவேண்டும். மேலும் வாரத்திற்கு ஒருமுறையாவது நீரை வெளியேற்றி சுத்தப்படுத்தவேண்டும்.
- வீட்டு உபயோக தண்ணீர் தொட்டியின் உட்புறம் மற்றும் வெளிப்புற சுவர்களை நைலான் துடைப்பான் உபயோகித்து கொசுக்களின் முட்டைகள், முட்டைப்புழுக்கூடுகள் மற்றும் முட்டை புழுக்கள் நீக்கப்படும் வரை 15 முதல் 20 நிமிடங்கள் பிளீச்சிங் பவுடரை கொண்டு சுத்தப்படுத்தவேண்டும்.

அட்டை-12: இரசாயன கட்டுப்பாட்டு முறைகள்

- திறந்தவெளி தண்ணீர்த் தேக்கங்களில் பூச்சிக்கொல்லி மருந்தை தெளித்தல்
- தாவரம் சார்ந்த கொசு விரட்டிகளை (வேப்பமர விதை மற்றும் இலைகளைக் கொண்டு புகைமூட்டம்) பயன்படுத்துதல் வேண்டும்.
- வீட்டிற்கு வெளியே புகை மூட்டுவதால், கொசுக்கள் கடிப்பதை 3 நாட்கள் வரை குறைக்கலாம். மேலும் வீட்டிற்குள் புகை மூட்டமிடுவதால் 5 நாட்கள் வரை கொசு கடிப்பதை தவிர்க்கலாம்.

அட்டை-13 : டெங்கு காய்ச்சலுடைய குழந்தைகளின் பராமரிப்பு

எப்போது மருத்துவரை அணுகவேண்டும்?

உங்கள் குழந்தைக்கு கடுமையான காய்ச்சல் மற்றும் கீழே குறிப்பிட்டு இருக்கிறவைகளில் ஏதேனும் இரண்டு நோய் அறிகுறிகள் இருக்குமெயானால் உடனடியாக மருத்துவரை அணுகவும்.

- கடுமையான தலைவலி
- வயிற்றுப்போக்கு
- சிவந்த தோல் சருமம்
- கண்களில் பின்புறத்தில் வலி
- மூட்டுவலி, தலைவலி மற்றும் எலும்பு வலி
- மூக்கு மற்றும் ஈறுகளில் இரத்தக்கசிவு
- தோலில் சிவந்த புள்ளிகள்

அட்டை-14: டெங்கு காய்ச்சலுடைய குழந்தைகளின் வீட்டு பராமரிப்பு

- காய்ச்சலை கட்டுப்படுத்துதல்
- காய்ச்சலை குறைப்பதற்கு குழந்தையின் நெற்றியில் ஈரத்துணியை மீண்டும் மீண்டும் இடவேண்டும்.
- காய்ச்சல் அதிகமாக நீடித்திருக்குமானால் குளிர்ந்த நீரால் குழந்தையின் உடலை துடைக்கவேண்டும்.
- போதுமான அளவிற்கு ஓய்வு அளிக்கவேண்டும்.
- அதிக அளவு நீராகாரம் பருக கொடுக்கவேண்டும்.
- குழந்தைகளுக்கு எளிதில் ஜீரணமாகும் ஊட்டச்சத்து மிகுந்த உணவை கொடுக்கவேண்டும்.
- மருத்துவர் பரிந்துரைத்த மருந்துகளை குழந்தைகளுக்கு கொடுக்கவேண்டும்.
- காய்ச்சலுடைய குழந்தையை கொசுவலையின் கீழ் படுக்க வைக்கவும், அல்லது கொசுவிரட்டிகளை பயன்படுத்தவேண்டும். குழந்தைக்கு காய்ச்சல் இருக்கும்போது கொசு கடிப்பதை தவிர்க்கவேண்டும்.

அட்டை-15: மருத்துவ சிகிச்சைக்கு பின் குழந்தைகளின் பராமரிப்பு

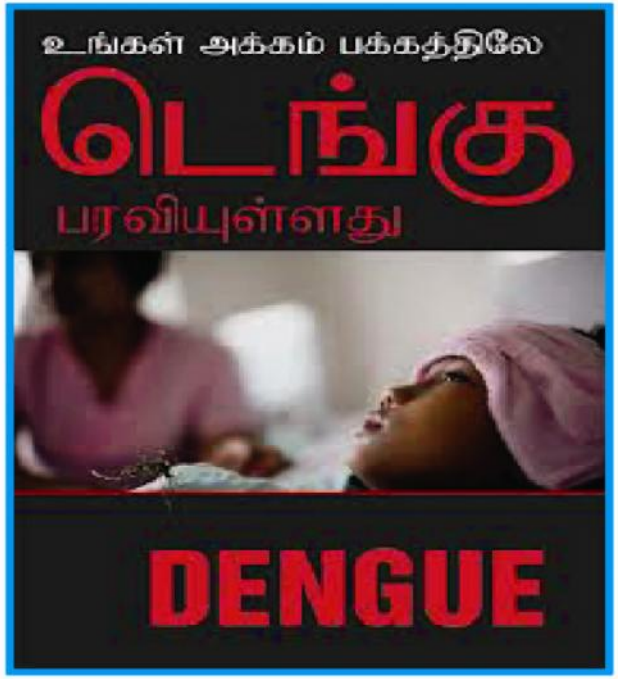
பொதுவாக 3 முதல் 7 நாட்கள் வரை நீடிக்கும் டெங்கு காய்ச்சலின் மருத்துவ சிகிச்சைக்கு பின் காய்ச்சல் குறையும்போது எச்சரிக்கையின் அறிகுறிகள் தோன்றக்கூடும். கீழ்க்கண்ட எச்சரிக்கையின் அறிகுறிகள் ஏதேனும் ஒன்று தோன்றுமானால் உடனடியாக மருத்துவரை அணுகவேண்டும்.

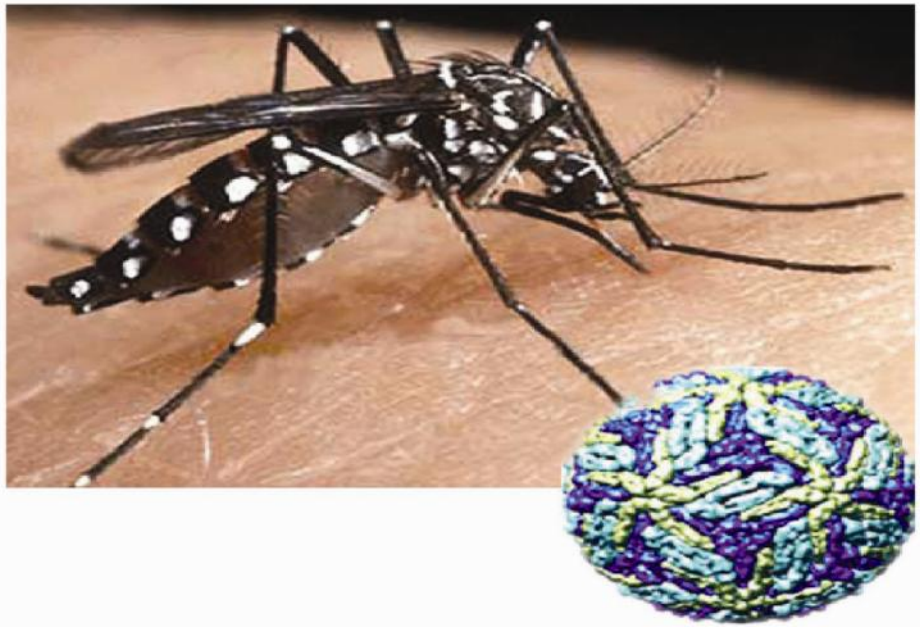
- கடுமையான அடிவயிற்றுவலி
- தொடர்ச்சியான வாந்தி
- கறுப்பான மலங்கழித்தல்
- மூச்சுத்திணறல்

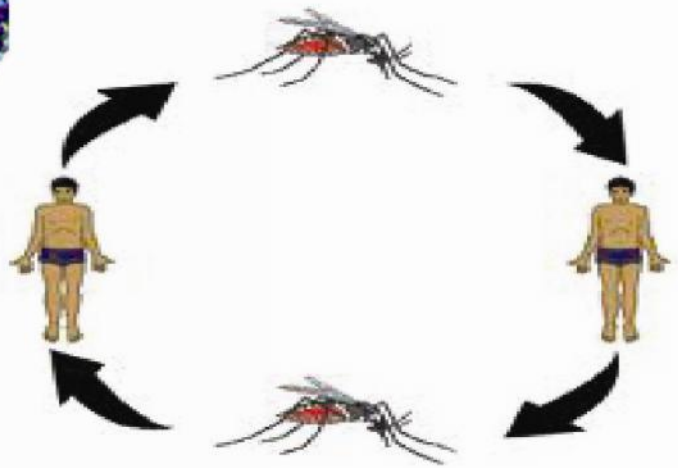
அட்டை-16: பின்விளைவுகள்

டெங்கு காய்ச்சலை சரியான நேரத்தில் குணப்படுத்த தவறினால் பின்விளைவுகள் ஏற்படும்.

- உடல் உறுப்புளிலிருந்து இரத்தம் கசிதல்
- இரத்த வாந்தி
- கல்லீரல் செயலிழத்தல்
- சிறுநீரகம் செயலிழத்தல்
- மூளையின் திசுக்களில் நோய் தொற்று
- இரத்த அணுக்களின் சிதைவு
- இருதய மூடுதிரைகளில் பாதிப்பு


உங்கள் அக்கம் பக்கத்திலே
டெங்கு
பரவியுள்ளது
DENGUE





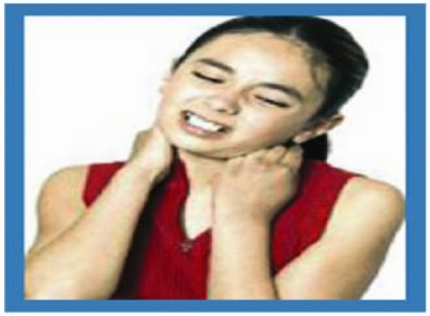




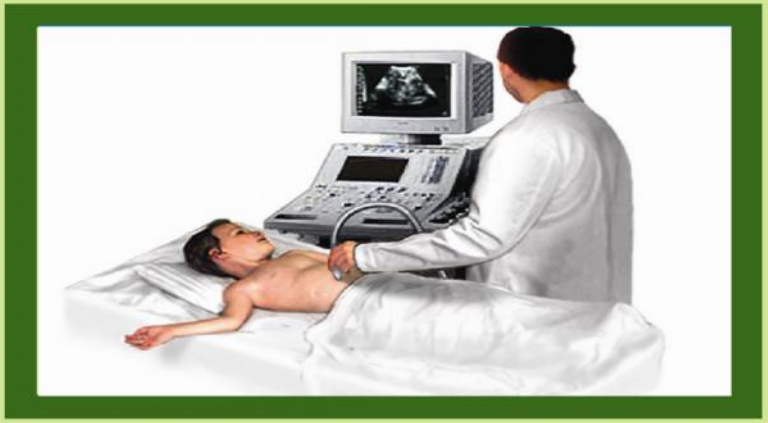








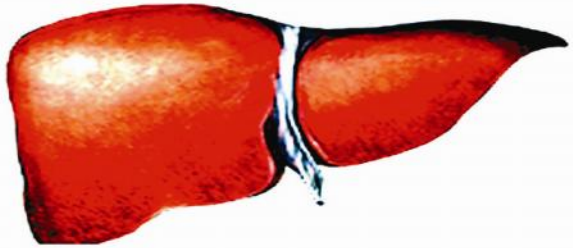


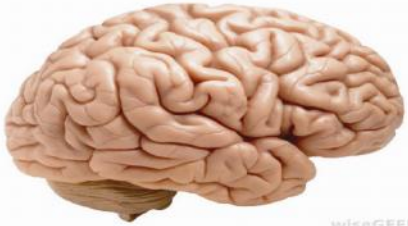

SUPER
OLK
lovekiss
JPN



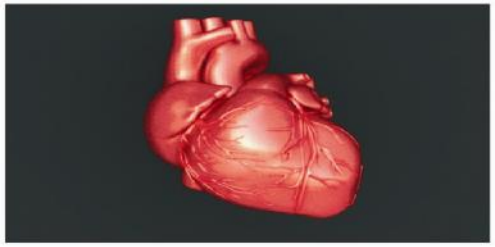





wiseGEEK


FOTOSEARCH



டெங்குவை ஒழிப்போம்!

நம் குழந்தைகளை காப்போம்!

ANNEXURE - K

PHOTOS